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BEFORE THE

ASSASSINATION RECORDS REVIEW BOARD

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In Re: :
:
PRESIDENT JOHN F. KENNEDY :
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College Park, Maryland
Monday, February 26, 1996

The deposition of DR. J THORNTON BOSWELL,
called for examination by counsel for the Board in
the above-entitled matter, pursuant to notice, at
8601 Adelphi Road, College Park, Maryland, convened
at 10:02 a.m., before Robert H. Haines, a notary
public in and for the State of Maryland, when were
present on behalf of the parties:

APPEARANCES:

JEREMY GUNN, ESQ., General Counsel
Assassination Records Review Board
600 E Street, N.W.
2nd Floor
Washington, D.C. 20530

DAVID G. MARWELL, Executive Director

DOUGLAS P. HORNE, Senior Analyst

TIMOTHY A. WRAY, Chief Analyst for
Military Records

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LAURA DENK

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C O N T E N T S

WITNESS

EXAMINATION BY COUNSEL FOR:

ARRB

Dr. Boswell

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P R O C E E D I N G S

MR. GUNN: We are assembled in the National Archives Annex at College Park, Maryland, to take the deposition of Dr. J Thornton Boswell. Dr. Boswell was one of the doctors who performed the autopsy on President Kennedy.

My name is Jeremy Gunn. I'm the general counsel of the Assassination Records Review Board. Sitting next to me is Doug Horne, a member of the Review Board staff. Also in the room is David Marwell, the Executive Director of the Review Board. We are expecting at some point today we will be joined by some other people, and I will introduce them when they come in.

Whereupon,

DR. J THORNTON BOSWELL

was called as a witness and, having been first duly sworn, was examined and testified as follows:

EXAMINATION BY COUNSEL FOR THE

ASSASSINATION RECORDS REVIEW BOARD

BY MR. GUNN:

Q I would like to show you a couple of documents, Dr.

Boswell, and ask you whether you have seen them previously. The first one on its face appears to be a letter dated December 7, 1995, to Dr. Boswell from David Marwell.

A Yes.

Q Attached to that letter is a subpoena.

A Yes.

Q You have seen the document before?

A I have.

Q I'd like to show you a letter--

MR. GUNN: I will state for the record that the document I have just shown to Dr. Boswell is Exhibit No. MD 102. The second document that I am handing to Dr. Boswell is Exhibit MD 103, and that is a letter dated January 2, 1996, from myself to Dr. Boswell.

BY MR. GUNN:

Q Have you seen that letter before?

A Yes, I have.

Q And is it your understanding that you are appearing at this deposition pursuant to the subpoena that was issued and the letter clarifying and straightening out the date?

A Yes.

Q Dr. Boswell, you were invited to bring an attorney with you today if you chose. Did you understand that you had that option if you so desired?

A Yes.

Q And did you just decide not to bring an attorney?

A Correct.

Q Dr. Boswell, at the completion of the deposition, you will have an opportunity to read the transcript of the deposition and make any corrections in it that you believe straighten or clarify what you said in the deposition today.

The deposition is being tape-recorded and is being taken by stenographic notes, and those records will be kept.

Dr. Boswell, I am going to try to ask you clear questions today. If there is any time that you don't understand or you'd like me to rephrase the question, don't hesitate to ask me, and I will try to rephrase it.

We are going to be working in the deposition today with a pre-numbered exhibit list, so the order of the documents that I will give to you will not necessarily reflect a sequential

order. So, for example, the first two documents you were shown were Exhibits 102 and 103. The exhibit numbers will be kept consistent throughout our work in the medical evidence in this matter.

Dr. Boswell, I'd like to ask you for your indulgence to not discuss the issues that we are talking about today until the Assassination Records Review Board completes its work on the medical evidence. You should, of course, feel free to discuss matters pertaining to the autopsy to any extent that you wish, but in terms of the questions that you are being asked here and your responses to those questions, we would appreciate your not discussing those issues. We expect that our work in this area will probably be completed by the end of this calendar year.

Is that acceptable to you?

A Yes.

Q Thank you. I appreciate that.

We are hoping that this deposition provides you with an opportunity to freely state and explain your understanding of the events that transpired at the time of the autopsy and

some events that happened immediately thereafter. If at any time you wish to elaborate on a question, please don't hesitate to do so.

Dr. Boswell, did you bring any records with you today pursuant to the subpoena marked Exhibit 102?

A I did not. I have no records. I have a large file, but they're all crank material that I've gotten through the mail and so forth.

Q With the letters that you're referring to, have you written back to people in response to those letters?

A No.

Q Did you take any notes or prepare any diagrams during the course of the autopsy of President Kennedy?

A Yes.

Q Do you have any of those notes still in your possession?

A No.

Q Dr. Boswell, did you discuss any substantive matters relating to the deposition today with anyone? And by that, I mean did you discuss with someone answers that you might give

to questions or how you would formulate answers to questions?

A No.

Q You are aware that Dr. Humes had his deposition taken here approximately two weeks ago?

A Yes.

Q Did you discuss the deposition with him after he completed that testimony?

A No.

Q Have you discussed the fact that you are being deposed with Dr. Pierre Finck?

A No.

Q Do you know where Dr. Finck is now?

A He's in Europe, as far as I know.

Q Other than with anyone connected with the Assassination Records Review Board, did you discuss the fact that you would be having your deposition taken with any other official or representative of the United States Government?

A No.

MR. GUNN: I'd like to state that we have been joined by two other people since the deposition began: first by

Colonel Tim Wray, and second by Laura Denk. Both of them are members of the Review Board staff.

BY MR. GUNN:

Q Dr. Boswell, I'd like to take you back to the time of the autopsy in 1963 and ask you whether you received at any point, directly or indirectly, any orders or instructions telling you what you could or could not say about the autopsy?

A No.

Q Did you ever come to believe that there was anyone who had a preference that you talk or not talk about the autopsy?

A Well, it was just standard military procedure that it be a limited--I'd be limited to what I would do and to whom I would talk and so forth. I was involved in an awful lot of investigations, the Warren Commission and people like that, and they, I'm sure, at some point told us not to discuss some things that they were working on. I at one point requested--at some point I was sent down by the Justice Department to New Orleans in the Clay Shaw trial, and I had instructions from the attorneys down there.

At some point later on, I was asked by--names, I have

to think hard now to remember names. One of the attorneys for the Justice Department asked that I write them a letter and request a civilian group be appointed by the Justice Department, I believe, or the President or somebody. And I did write a letter to him, Carl Eardley. You have a copy of that, I think, probably. And I'm trying to think. I did call the bureau at some point and request permission to discuss the autopsy. I guess it was the House Review Committee subpoenaed us or called us in or something, and I think I called the bureau and asked--I was out of the Navy by that time--and asked about, you know, what I could say and so forth.

The problem was I don't think Jim or Pierre or I had any question about being able to say anything we wanted to at any time, except that Jim had promised George Burkley, the President's physician, that we would not discuss the adrenals.

And we had to always be very cautious about talking about that and with whom we spoke about it. I think he had promised George Burkley that we would not discuss the adrenals until all the then living members of the Kennedy family were dead, or something like that. I don't remember. He made that promise. I didn't,

because I never talked to George Burkley. And at a point about a year-and-a-half ago, we got together with the AMA, and at that time Jim agreed that I could--because other people had been talking about the adrenals, he agreed that since I had not made a promise to George Burkley, I could talk about it.

And so since then we've been pretty straightforward with the few people we've talked with about that.

Q In your last answer, you referred to the House Committee. Were you referring to the House Select Committee on Assassinations?

A Yes.

Q Why did you call the bureau--and I assume by that--let me ask the question first. By the bureau, what were you referring to?

A The Bureau of Medicine and Surgery.

Q And why did you contact the Bureau of Medicine and Surgery to determine whether you could speak to the House Select Committee?

A You know, that was, what, 25 years ago, 20-plus years ago, and I don't have a firm memory of why. I suspect it was

because of the adrenal situation.

Q But other than with respect to the adrenals, you're aware of no orders or instructions or preferences that were ever stated by anyone in the U.S. Government on discussion of the autopsy; is that correct?

A I was an employee of the medical school there at Bethesda. That's a euphemism. The medical school at that time was not a true medical school. It was a training place for technologists, mainly. And we had a commanding officer by the name of Stover, and I'm sure that he instructed us immediately after the autopsy, just cautioned us about publicity and so forth. But we were never given any instructions about not being able to talk to anybody or anything.

Q Are you aware of any person connected with the autopsy who received any orders not to discuss any matters relating to the autopsy?

A No, because they blabbed from day one. Some of those corpsmen did. And they made some terrible mistakes and statements.

Q Are there any mistakes in the statements of the

corpsmen that come to mind now that you think should be corrected?

A Well, one was about the way the body arrived. There have been many stories about the casket that it came in, the wrappings around the body, and all those were distorted. The true fact was that the casket was a bronze casket that had a--when it arrived, it had a broken handle, and that had to be taken out of--he was brought in the morgue in that. And the casket was removed by the--by Gawlers, and then another one was brought in. And all kinds of stories were written about how first there was no body and no casket, and different kinds of caskets were described. Then the wrappings, the President arrived wrapped in sheets and a pillowcase around his head, and different stories were published about that.

Jim Humes, immediately when we removed the wrappings, stuck those--we had a washing machine in the morgue, and he stuck those in the washing machine, said he didn't want those appearing in a barn out in Kansas sometime, and they were all laundered.

Just offhand, I'm sorry, I can't think of other

stories, but there were a lot.

Bob Karnei, he was later--when he retired, he was the commanding officer at the AFIP. He spoke with Livingstone, who has written those three books, and he told several different stories about the adrenals, none of which were true.

Memories, you know, change, have changed over the years, and I'm sure a lot of the stuff that I've heard is incorporated in my memory now. But some of those guys, their memories changed fast.

Q Is there anything that you can think of that would keep you in any way from being able to tell the full truth, to the best of your recollection, today?

A No. Just my memory loss is the only thing.

Q What was your role in the autopsy of President Kennedy?

A Well, I got a call from Bruce Smith at the AFIP. I think--I'm not sure at all about the time, but I think it was around 4 o'clock in the afternoon, and he said that the President was being brought to Bethesda for an autopsy. And I told him that I thought that was foolish. I said, Why isn't

he brought there at the AFIP where you have more facilities?

And he says George Burkley or somebody--I think it was George Burkley that had requested it come to Bethesda. And we discussed this over the phone for a little while, and then after it was clear that we were going to do the autopsy, I decided that--well, first I tried to call Jim. Jim was on leave at the time. He was on a short vacation. And I knew that they were having a party that night, so I was reluctant. But I called him. I think I didn't get him.

I don't know how familiar you are with the Naval Medical Center, but there are a number of commands there, all under the central command. And I think the first place I went immediately was to the commanding officer of the hospital and told him what the situation was. And by this time, everybody knew that Kennedy had been killed and that they were on their way back. And the commanding officer of the hospital and I then began to arrange for various people to come in and security around the hospital and that sort of thing.

Then we went to the commanding officer of the center, I think the commanding officer of the hospital and I. First

he called in a lot of other heads of departments, medical photography and X-ray. I think that was it. And then he and I went up to the commanding officer of the center, and we discussed it, and he also discussed about security and our ability to do this and so forth. And at some point later that afternoon, I was able to get in touch with Jim Humes, and we discussed how we'd do it. And then I was moonlighting at the time, and so I went over to Suburban Hospital about 6 o'clock and did my work over there for a couple of hours, and I think I arrived back at the Navy 7:30 or so, at which point Jim arrived. And then I think the body arrived around 8:00.

And we had agreed that Jim would be the senior prosector. I was Chief of Pathology, but he was my superior because he was the Chief of Laboratory. And I just thought it was appropriate that such an important case as this, that he should be the senior prosector. And he did not agree early but then did agree to that. And we discussed having a forensic pathologist with us, and we decided it was wise to do that. We considered whether it should be a civilian or military, and we decided in view of everything that had happened to that point

that it would be military. And I knew Pierre Finck because I had worked with him at the AFIP. And so I called him.

I don't think he arrived at the time we started the autopsy. He arrived a little bit later than that, but before we had made any incisions. And then it was pretty much a team effort. Jim and I actually did the autopsy, and Pierre was just more or less observing and recommending and advising and so forth.

We did--I think we each did some of the dissection, and I did most of the recording, unfortunately. I drew the pictures. Jim made much of the decisions about the X-ray, X-rays, photographs, although we discussed back and forth what we should do and so forth.

That was about my role. If you have questions as far as what Jim described, maybe you could ask me, and I could elaborate or something.

Q One question I had on your answer where you said, if I recall correctly, that unfortunately you were in charge of recording things. Why did you say "unfortunately"?

A Because of all the people who've described my drawing

there, most of our problems have resulted from that.

Q When you say drawing, are you referring to a document I'm now about to show you as being Exhibit 1?

A Yes.

Q While you're looking at Exhibit No. 1, were you the person who filled in the measurements that are provided on the first page?

A Most of this writing is mine.

Q You're referring to the bottom half of the page?

A The diagrams and the labeling of that. Some of these measurements are, but I see some writing here that's not mine.

So I presume that one of the autopsy assistants must have written some of the numbers.

Q Now you're referring to the top half of the first page of Exhibit 1?

A Correct.

Q So where there are measurements for the heart, for example, and for the spleen; is that correct?

A Yes. I think that Jim was probably measuring and reading these numbers off, and somebody else was writing these

down. Jim was making these measurements from the--where the gunshot wounds are from various bony prominences. He was reading those off, and I was writing all these in.

Q In your last answer, first you were speaking of the measurements or the weights of the organs as being measured by Dr. Humes and somebody else writing them down, and then for the measurements on the bottom half of the page near the diagrams, that Dr. Humes is the one who made the measurements and that you recorded them.

A Right.

Q Is that correct?

A Yes. In this second diagram, this whole thing is mine.

Q You're referring to the second page of Exhibit 1?

A Right, the skull injuries and the bone fragments.

Q Okay. We'll come back to those a little bit later.

I'd like to show you a document that is Exhibit 26, which I will state appears on its face to be a memorandum from Andy Purdy to Jim Kelly and Kenneth Klein, with the title "Notes of Interview with Dr. J Thornton Boswell, August 17, 1977,

National Orthopedic Hospital, Arlington, Virginia."

Dr. Boswell, have you seen the document previously that is now marked Exhibit 26?

A Many years ago. It must have been in that year, 1977.

Q Were you at one point interviewed by staff members from the House Select Committee on Assassinations?

A Yes.

Q And would it be fair to say that, to the best of your recollection, Exhibit 26 would appear to be notes taken from that interview with those staff members?

A True.

Q I'd like to draw your attention to page 2 of Exhibit 26, and I'd like just to ask you to read for a moment the full paragraph that's in the center of the page, beginning with the words "Dr. Boswell had been concerned" and going through the end of that paragraph.

[Pause.]

BY MR. GUNN:

Q You've had a chance to read that now, Dr. Boswell?

A I have.

Q Now, we all know that when people record what other people say, things are sometimes exactly correct and sometimes the nuance is off. I'd just like to ask you whether in reading that paragraph any portion of it seems to you to be inaccurate, to the best of your recollection?

A I'm not sure about Robert McNamara. I see this now, and whether I said that or whether that was true or not, I don't know. I know that Dr. Burkley and other people were running around up in the tower with Mrs. Kennedy, but whether it was McNamara or not, at this point I don't know.

Q "At this point," you mean in 1996?

A Right.

Q Was it your impression in 1963 that Dr. Burkley was supervising what was going on in the autopsy room?

A Well, he wasn't supervising very closely. We were acting on certain of his instructions. Initially, Jim--at this time, I can't remember how Jim got his instructions from Burkley.

I don't know whether Jim actually went upstairs to see Burkley or whether he came down. I never saw Admiral Burkley in the morgue. But at some point, Jim understood that we were to do

a limited autopsy to find--I think the initial thing that they told us was that we were to find the bullets, that they had captured the assailant, and that that's all they needed. And Jim argued and said that that was--you know, we couldn't do that kind of an autopsy. But we started out just with the idea that we were going to do an external examination and then we were going to do a limited internal examination. But at a point shortly after we started, it was agreed that we would do a complete autopsy. But I don't know how Jim got those instructions, whether he left the morgue and went up to see Burkley or whether Burkley came down or whether he sent a messenger. There was just too many things going on, I guess, that I wasn't aware of how that all happened.

Q Was it your understanding that the instructions about the scope of the autopsy were, however, coming from Dr. Burkley?

A Oh, yes.

Q If I understood you correctly, you said that you have no recollection of Dr. Burkley being in the morgue. Is that correct?

A I don't remember him being in the morgue at all.

Now, he could very well have been in there very briefly early in the autopsy, but I'm sure that he was upstairs with Mrs. Kennedy most of the evening.

Q Ultimately, did it seem to you as if a complete autopsy had been performed on President Kennedy?

A Well, a generally complete autopsy was done. We did not do some of the more radical things that you do in forensic autopsies, like remove limbs or large portions of spine and that sort of thing. But, otherwise, a complete autopsy was done.

Q Did you ever understand that there were any orders or instructions to limit the scope of the autopsy of the brain?

A No.

Q Did you ever understand that there were any orders or instructions to limit the autopsy of the organs of the neck?

A No.

Q Were the organs of the neck dissected?

A Yes.

Q Did you hear anyone at any point during the autopsy request to examine the clothing that President Kennedy was

wearing at the time he was shot?

A We all discussed the clothing. It was made--I guess we asked where the clothing was. I certainly remember Pierre asking about the clothing. But we didn't know where the--we knew that he had been in the hospital. He had arrived in our hospital in sheets, so we assumed that either the clothing was down there or was in transit, and we were not concerned about it at that point. But the clothing became available to us; it may have been several days or weeks later.

Q Wouldn't it be standard practice in a forensic autopsy to have the clothing available for inspection during the autopsy?

A Well, under normal circumstances, but these were not normal circumstances. I mean, the body was transferred from Dallas and everything, and we certainly understood that that was not feasible. But then Jim made the decision early in the evening that we had to talk with the doctors who had done the examination in Dallas and did subsequently in the morning talk with them and discuss the wounds and clothing and so forth.

Q When was the first conversation with doctors in

Dallas, as best you recall?

A Saturday morning.

Q Do you know of any reason that they were not contacted on Friday night during the autopsy?

A I guess just the fact that we were pretty well tied up all night. It would have been--it was midnight after--when we finished, and Jim wrote up the autopsy. I followed him home, and then he took all of our notes to his house, and then he wrote up the autopsy before he went to bed. The three of us separated, and I don't think we discussed calling Dallas at that hour of the night.

Q Do you recall Dr. Finck asking to examine the clothing during the autopsy?

A Not specifically.

Q So as best you recall, there was a discussion of the clothing, but not a request to see the clothing. Would that be fair?

A Right.

Q Do you recall there being any requests being made by you or anyone else to other people who were there regarding

shell fragments, bullets, anything else that would have been useful to see during the course of the autopsy?

A I know there was discussion because there were some security people in the morgue and on the telephone--the telephone was on the wall right at the head of the morgue table where we were working. And I remember them telling us that a bullet had been found, that bone fragments had been found, and I believe that they were being transported to Washington separately. And the bone fragments eventually came into the morgue that night. The bullet may. I'm not sure about that.

Q Do you remember seeing any bullets during the course of the autopsy?

A Fragments. In the autopsy we found very minute fragments, mostly on the X-rays.

Q So this would be something more like particles or slivers, not--

A Very small.

Q Okay.

A I'm not sure when I saw the bullet that was sent from Dallas. I remember seeing it at some point, but whether it

was during the autopsy or during the Warren Commission investigation, I'm not sure.

Q Did you understand at any point during the course of the autopsy that anyone wanted the autopsy to be expedited?

A No.

Q So you didn't understand that you were in any rush or under any compulsion to hurry?

A Not at all.

Q Did you ever hear any instructions or communications regarding or restricting the scope of the autopsy other than what you've already said?

A No. It was always an extension of the autopsy rather than further restrictions.

Q Prior to the time you first saw President Kennedy's body, had you heard any communications about the nature of the wounds that he had suffered?

A I don't think specifically. I think just the fact that he had a head wound.

Q The doctors in Dallas who had treated President Kennedy had a news conference on the afternoon of November 22nd

that would have been at approximately 4:15 to 4:30 Washington time. Had you heard any communications about what those doctors had said during the press conference?

A No.

Q Do you know whether Dr. Humes had received any information prior to the beginning of the autopsy about the nature of the wounds on President Kennedy?

A I'm almost sure that he didn't.

Q Have you ever heard him say that he had any information prior to the beginning of the autopsy?

A No.

Q Are you familiar with the name of Dr. Robert Livingston?

A Yes. Livingstone, I believe it is.

Q I'm referring to a person formerly affiliated with the National Institute of Mental Health, not Harry Livingstone.

A Oh. No.

Q You don't know the name of Dr. Robert Livingston?

A I don't believe so.

Q Did you or Dr. Humes ever use the telephone in the

autopsy room during the course of the autopsy?

A I didn't, and I--well, now, wait a minute.

I may have called Pierre or called the AFIP before or in the early part of the autopsy. That's the only time I might have used it. I'm not sure about that. And Jim, I don't think he used it either.

Q Do you remember Dr. Finck using the telephone?

A I don't believe so. It was pretty busy all evening.

Q The telephone?

A Yes.

Q Who was using the telephone?

A Security people mostly.

Q And could you overhear their conversations?

A A lot of it, yes.

Q And do you know with whom they were speaking?

A No idea.

Q Did they ever tell you anything at all during the course of the autopsy about what the doctors in Dallas had reported to the media?

A No.

Q In the ordinary course of an autopsy procedure, would a prosector want to know information in the possession of the treating physician of the deceased?

A Well, you'd try and get that beforehand, but if you didn't have it and you ran into something unusual or of a bit of a problem, then you might try and do that.

Q Do you have any impression as to whether the prosector should have been informed during the course of the autopsy or before, what the treating physicians in Dallas had learned during the time of the treatment of President Kennedy?

A Well, it would have been nice, and we discussed that, actually, because when we first started doing the autopsy, there were marks on the body that we had difficulty--they had started to do cutdowns, and they made little incisions around the nipples, and there was no tubes or anything there. And we didn't know whether they were actually trying to get into vessels or going to get into the chest, whether he had had a hemothorax or something. And then we had difficulty in interpreting the wound in his anterior neck. And at the point when we came to those, we discussed whether or not we might call the Dallas

hospital. But we elected not to, and I don't know why at this time.

Q When you referred to the wound in the anterior neck, what was your first impression as to what that wound was?

A I'm not sure what our first impression--oh, we thought that they had done a tracheostomy, and whether or not that was a bullet wound, we weren't sure, initially. It was after we found an entrance wound and then the blood external to the pleura that we had a track, and that proved to be the exit wound; but it was so distorted by the incision, initially we just assumed it to be a tracheostomy.

Q Did you reach the conclusion that there had been a transit wound through the neck during the course of the autopsy itself?

A Oh, yes.

Q Did you receive any kinds of written reports at all from Dallas about the nature of the wounds on President Kennedy's body prior to the completion of the autopsy?

A No.

Q Were you ever told that such written reports had been

prepared?

A No. And, in fact, we never saw any reports. We may have seen such a report during the Warren Commission's investigation, but we certainly didn't in the early days after the autopsy.

Q Dr. Burkley was present in the emergency room in Parkland Hospital during the time President Kennedy was treated.

Did Dr. Burkley tell you anything about what he observed at Parkland Hospital?

A He didn't tell me anything, and I don't think that he told Jim.

Q Some of the other people present in the autopsy room also had been present with President Kennedy in Parkland Hospital during the treatment. Did any of them tell you what they had observed during the treatment of President Kennedy?

A No one did, and I'm trying to think who might have been. Just Secret Service men would have been the only ones there. They were the only ones that could have been in both places, because no members of the--oh, I'm sorry. His military aides were in the morgue, and they were probably also present

in Dallas. But they didn't say anything.

Q You've referred to Secret Service agents as well as the President's military aides being present in the autopsy room. Who else do you recall was present in the autopsy room?

A Aside from those helping?

Q Yes.

A There were some staff people, on-duty staff people.

Q Staff of Bethesda Hospital?

A Of the Naval Hospital. I remember--I can't tell you now who they were, but I remember the chief of surgery and the chief of medicine, and then there was duty staff who were in and out. There were probably 30 or so people in the morgue.

It's like an amphitheater. There were two rows of benches up elevated above the morgue table, and it was a rather spacious morgue, so it was not inconvenient or anything. And people always did that when we did autopsies.

Q Was Captain Stover present at any point during the autopsy?

A I think he was in the morgue; very limited. I'm not--I don't think he stayed, but I think he was there just

to see that everything was--that people were helping as necessary and so forth.

Q Was Admiral Galloway present at all during the autopsy, do you recall?

A I rather think he was, but I would not swear to that.

Q Do you recall whether the Surgeon General of the Navy was present--Admiral Kenny?

A I can't say. I really was tied up in the autopsy, and I was paying no attention. The only attention I got of people moving around was the--I think it was the Navy military aide. One of his military aides was really fidgety and moving back--walking up and down the hallway and so forth, and he's about the only one that I remember very well.

Q Were any of the people present at the autopsy making suggestions or giving any kinds of instructions during the autopsy?

A No.

Q Were there any members of the Joint Chiefs of Staff present during the autopsy?

A I don't think so.

Q Could you describe in a general way what the scene at the autopsy was like? By that, I mean was it noisy? Was it hushed silence? Were people talking? How would you describe it?

A Well, for all the people in there, it was very quiet, really. We were all--Jim and Pierre and I were talking. We did most of the talking. I could hear occasional telephone conversations or occasional conversations around the room, but for the most part, it was very quiet and subdued.

There was an awful lot of activity because we had the radiologist and his assistant, we had the photographers, and they were--the photographers were quite busy, because every time we turned around we had him take a picture.

Q I'd like to show you a document that's been marked as Exhibit 22, which appears to be from the May 27, 1992, issue of the Journal of the American Medical Association. Have you had an opportunity to see the document previously that I am now showing you that's been marked as Exhibit 22?

A Yes.

Q Could you turn to page 2798 of that article? I'd

like to draw your attention to the center column, the first complete sentence of that column. I'll read for the record what it says. It appears that these are the words of Dr. Humes, and it says, "Still," he says, "the scene in the autopsy room was somewhat like trying to do delicate neurosurgery in a three-ring circus."

Do you recall Dr. Humes saying something like that to the Journal of the American Medical Association?

A Vaguely.

Q First, does that sort of description seem to you to be accurate, to the best of your own recollection, about the events at the autopsy?

A Well, I didn't think it was as confusing as Jim apparently did. It may have been because my attention was on the work, but the whole evening was like a three-ring circus. But I didn't think the crowd was a problem.

Q In what respect would you say that the whole evening was like a three-ring circus?

A Well, so many very interesting things happened. We had a pretty good size crowd in the morgue. We were waiting

for the body, and Jim--somebody asked Jim to step outside, and he did. And they were unloading the body from an ambulance, a Navy ambulance, and I think Jim--he's rather boisterous, you know, and he said, "Who's in charge here?" And some Army general said, "I am." And Jim directed them to bring the body into the morgue then.

Well, a lot of people heard that, "I am," and that was in the papers almost immediately. And in the trial in New Orleans, that was in the paper. But that just--little things like that kept happening. The body was brought in, and we opened the casket on a gurney and removed the body to the autopsy table, and Jim had the sheets laundered.

Then we had to take external photographs, and we had to take X-rays, and that was--we couldn't do anything at that point except make decisions and wait for the X-rays to come back and see where the bullets were, which we were primarily interested in at that point. But at that point, we then got pretty involved in the dissection, and everything sort of dissolved around me and I think Jim at that point, because we were devoting all of our attention to the remains. But I guess

subsequently so many things have happened about the general's comments and so forth that it just seems like it was chaotic at that point. And I think it may have built up over 33 years to Jim also that it was like a three-ring circus. I don't think it really was.

There was a lot of activity and a lot of people, but everything was running very smooth.

Q Did you see yourself the casket with President Kennedy in it being opened?

A Yes.

Q Did you help open the casket yourself?

A I doubt it. I mean, I would not normally, because we had people that did things like that. I don't think I actually helped or was too near it.

Q When the casket was opened, did you help at all in lifting the body out of the casket?

A I don't think so.

Q Do you recall who did?

A I think a couple of our morgue attendants did that, probably.

Q Were you personally with the body of President Kennedy from the time he was unloaded from the casket until the body left Bethesda later that morning?

A Yes.

Q When the body was first unwrapped, particularly the head, was the brain still present in the cranium?

A Most of it.

Q When you say most of it, approximately how much was there--

A Well, probably half of one hemisphere was absent. The bullet came in here, went through and exploded, and bone was eviscerated, and the upper surface of that side of the brain was missing.

Q During your answer you were pointing to parts of your head, which, of course, wouldn't be reflected on the record.

Could you just describe in a general way--and we'll be more specific with this later, but when you say that it entered here, you were pointing to--

A The back right side of his skull.

Q Near the hairline, would that be fair, or-

A No. It's up above that. Well, whose hairline?

Q President Kennedy's.

A He had hair cut about like mine, and it was right up here: above his ear and toward the midline. And then the top of his head was blown off. A 14-centimeter segment of it was blown off. And it was on the right side of his brain that the brain was missing.

Q While the body was being unwrapped, did you see any bullet fragments or pieces of skull fall out with the wrapping?

A No.

Q Dr. Boswell, I'd like to show you a document that appears as Exhibit 26. I'm drawing your attention to page 3.

Could you look at the paragraph on page 3 of Exhibit 26 that begins with "The radiologist began his work very early on"?

A Just that paragraph?

Q Yes, just that one paragraph. You can read as much of the document as you want, but I just have a question for you on that paragraph.

The document quotes you as saying, quote, that you "thought it was a wound," referring to the tracheostomy. The

statement that's here in this paragraph isn't entirely clear.

My question to you would be: Do you recall at any point thinking before the time that you learned that the wound on the anterior neck was the tracheostomy incision that it may have been a wound of some sort?

A I think it was pretty obvious from the beginning that it was a tracheostomy wound. Then as the evening progressed, the question became whether it was both an exit wound and a tracheostomy wound, because right in the middle there was what appeared to be the exit wound through which they had cut. I don't understand this.

Q When you say "this," you're pointing to the paragraph in document 26?

A Yeah, in the deposition here. "Dr. Boswell indicated that regarding the tracheostomy the doctors thought it was a wound." Well, I don't know what I might have said to make them say that, because a tracheostomy wound is a wound, and our conclusions had been that night and then reinforced the next day that it was a tracheostomy through a bullet wound.

Q At the time that you first saw the body of President

Kennedy, did you see any other wounds or incisions on the body that you thought or came to believe were surgical wounds?

A Well, on his chest there were--there was an attempt or the beginning of a surgery wound. I don't know to this day what--I think we did learn that they had been preparing to intubate him, and at some point they--I don't know whether it's marked on there or not. Oh, yeah, here we are.

Q When you're referring to the wounds on the chest, I'm now showing to you Exhibit No. 1. Are the wounds that you're referring to those that are marked on the diagram with the body facing forward on the chest?

A Yes.

Q In addition to those wounds and any other cutdowns that you might see on the document and the tracheostomy wound, was there any other surgical incision that you saw at the time that you first saw the body of President Kennedy?

A No.

Q More specifically, did you see any incisions that appeared to be any form of surgery in the head area prior to the time that you conducted any procedures at Bethesda?

A No.

Q Dr. Boswell, I'd like to show you a document that's been marked as Exhibit 7 and ask you whether you have ever seen that document previously. I'll state for the record that it is designated Autopsy Manual by the Departments of the Army, the Navy, and the Air Force, dated July 1960.

A I'm sure I have, but it's been a long time.

Q Dr. Boswell, could you turn to page 72 of the Autopsy Manual? Could you look at the portion that is marked Appendix 3--this is on page 72--and tell me what you understand that page to be, if you do have an understanding of it?

A Where? I'm sorry.

What was your question?

Q Could you tell me what you understand Appendix 3 to be in Exhibit No. 7?

A Well, it's the weight of most of the organs and average--lists the average weight, variation, measurements.

Q I'd like you to look at the average weights of bodies as listed in Exhibit No. 7 as compared with the face sheet of President Kennedy and ask you whether you notice any particular

differences. And maybe we can start out with the right lung.

A The right lung goes from 360 to 570, average 450. The right lung of President Kennedy was slightly under that weight. The left lung is 325 to 480, average 375. His was 290. And it's considerably less than that.

Q Okay. For the spleen?

A The spleen, President Kennedy's weight, 90 grams. In a 20- to 65-year-old person, average is 155.

Q So President Kennedy's was--

A Small.

Q Small?

A Mm-hmm. Kidney, his is slightly under, his right kidney is slightly under average. The left kidney is just about average.

Q How do you--

A I'm sorry. Average is a hundred--I'm sorry, 313. So his was considerably under average.

Liver--I don't know how that got down to 650. Average is 1,650, and his was 650. Heart, 350; his is just about average, the heart.

Q So several of the organs would be under or substantially under what the average weight would be?

A That's right.

Q Did you notice that at the time of the autopsy? Did anyone remark upon that?

A I don't know. As I say, I don't know whether I ever appreciated that or not, because I did not write those and I didn't measure them--well, I probably did measure some of these because I think I took the lungs out and maybe the heart.

Q I note that there's no weight there for the brain. Do you remember whether the fresh brain was weighed?

A I doubt that it was weighed.

Q Why not--

A Well, I shouldn't say that. It was formalin-fixed. We floated them in formalin and a piece of cloth, and it was taken out, and it probably was weighed. Why the weight is not down here, I don't know.

Q Wouldn't that be a fairly important thing to weigh if there were a gunshot wound to the head?

A Especially with some of it missing, that's true.

I don't know why the weight's not down here. I remember taking it out. We had a neuropathologist from the AFIP that came over, and we took it out of the formalin after it was fixed a couple of days--in fact, on Monday. And I suspect that that weight would be on a separate piece of paper, because I know it was weighed at that time. But we elected not to cut the brain because the trauma was evidenced on the surface without having to cut it, and we thought that it may be important to preserve.

And then we never saw it again. And we put it back in the formalin, and it was delivered to Admiral Burkley in a bucket, in the formalin, and then we never saw it again.

Q When was it delivered to Admiral Burkley?

A I believe it was on Monday, but I'm not sure, because we wrote up an addendum to the autopsy, I think on Monday, after we had examined the brain. And I had read the slides on Sunday, so that part of the report--there was an addendum, though, that Jim took with the brain, and I think he took the paraffin blocks and the tissue slides with the brain and the addendum down to Admiral Burkley on Monday. But that I'm not absolutely sure. I'll rely on Jim's memory for that.

Q There are a few questions I wanted to ask you about some of your last statements. First, you made the statement, as I have it down, that you know that it was weighed at that time. It wasn't clear to me at what time you were saying that it was weighed. At the time of the autopsy or--

A No.

Q --the supplemental examination?

A The supplementary examination. I'm sure it must have been weighed at the autopsy. I know of no reason why it wouldn't--the scale is right there at the head of the table, and every organ, as it's removed, is weighed. I'm sure it was weighed. Do we not have the weight of the brain in the final autopsy report?

Q There is no weight--in the supplementary report, when it was weighed at that time, there is a weight. But I am aware of no weight prior to the supplementary report.

A Okay.

Q Are you aware of any time it was recorded prior to that?

A No, not--unless it was put on a separate sheet of

paper. Obviously it isn't on this one.

Q When you say "this one," you're referring to Exhibit 1--

A Now, as far as the difference in the weights from average and these, I don't know why these are so far--these are really far off, the liver, for instance. The rest of these I wouldn't be too concerned about. They could be very accurate or they could be inaccurate.

Q Do you see any of the organs of the neck being weighed on Exhibit 1 on the first page?

A No, and the only organ in the neck would be the thyroid.

Q Do you know whether the thyroid was removed from President Kennedy?

A I don't remember that it was. It need not have been necessarily removed. I mean, it could have been examined in situ and not removed. But I do not remember.

Q With there being a bullet wound transiting the neck, would it not be standard autopsy procedure to remove all of the organs of the neck?

A Normally it would. The trachea, larynx, and everything.

Q Do you know whether the trachea, larynx, and thyroid were removed?

A I'm almost sure that we did not remove the trachea and larynx. I believe the lungs were removed separately. Normally you would take all the neck organs out with the thoracic organs.

Q Did anyone request that the organs of the neck not be removed?

A No.

Q You had said in response to an earlier question, if I understood you correctly, that it was important to preserve the brain in its state without sectioning. Did I understand that correctly?

A Well, we decided that that's what we would do. We would--that it wasn't necessary in order to describe and determine the injuries to the brain to do a regular sectioning of it at that time, and we thought it might be more important to save for later investigation.

Q You stated previously that it was your understanding that the brain had been delivered to Admiral Burkley on Monday.

The assassination was on Friday, the 22nd, and that would make Monday the 25th. Is that correct?

A Yes. It probably was not delivered that early because ordinarily we kept a brain and fixed it for five days.

Now, regular brain cutting was on Wednesday, and--but on the other hand, Jim was anxious to get all the material down to the Admiral, and I'm not sure about those times.

Q What was it that made you think that it was on Monday?

Or how--

A Because we were expediting things so rapidly and getting everything down there, and I just had thought that Jim took the supplementary report, the slides--I know I had the slides on Sunday, and the paraffin blocks, and all that was to go to the White House. And I just thought that probably we got it ready and got it down there on Monday. But you're right about the fixation of the brain. It may have been a couple of days later. But it was within that first week after the autopsy.

Q Let me go back to Exhibit No. 1. I'd like to show you the bottom left-hand corner of that where it appears to state in handwriting, "Verified, G. G. Burkley." Have you ever seen that or noticed that before?

A No.

Q Do you have any idea what that is?

A No.

Q I'd like to point out to you the two lines on the diagrams, both on the left diagram and the right diagram, the two lines that seem, at least from a lay perspective, to be demarking the neck. That's not a very precise term, obviously. Could you tell me what those two lines are that you see? Do you know what those signify?

A I'm sorry. I can't. I cannot tell you why those are...

Q I'd like you to note on the right diagram; on the head there appears to be a circle with an arrow pointing up and to the left. Do you see that?

A Yes.

Q Are you the person who made that mark?

A Yes.

Q Could you tell me what that mark signifies?

A Well, at this late date, I have to assume. I remember that there is a--in the scalp there was a tunneling of the wound through the skin and subcutaneous tissue, and I think that is the direction that the tunnel went.

Q Does that mean that there was a tunnel between the entrance point and the point where the bullet entered into the skull?

A Yes.

Q About what was the distance of the tunnel from the entrance point in the scalp to where the bullet entered the skull?

A I would assume that that's 15 by 6 millimeters, 6 millimeters across, and that the tunnel itself was a centimeter-and-a-half.

Q So the tunnel would be definitely shorter than an inch, less than an inch?

A Less than an inch. About three-quarters.

Q Could you turn to the second page of Exhibit 1? I'd

like to ask you some questions about the diagram. First, just to make sure the record is clear on this point, you were the person who drew the diagram and made the markings on the second page?

A Yes, right.

Q I note in the center of the--well, maybe if you can just describe in your own terms what the drawing signifies, just in a general way.

A Well, right in the center is--or just above the anterior portion here is the word "missing," and all the bone for a distance of 17 centimeters in this direction was missing.

Q I'm sorry. If I can back you up for just a moment, if you could just describe in a general way what the diagram signifies before any of the measurements are described.

A Can I go back just a little bit and--

Q Sure.

A There was a big wound sort of transverse up like this from left posterior to right anterior. The scalp was separated, but it was folded over, and you could fold the scalp over and almost hide the wound. When you lifted the scalp up, you could

really lay it back posteriorally, and there was a lot of bone still attached to the scalp but detached from the remainder of the skull. And I think these parts back here probably reflect that.

Q Dr. Boswell, I'm sorry to jump in here, but I just want to make sure that the record is going to be clear here.

And we can come back to this, and I want you to explain it the best you can. But would it be fair to say first that the diagram that we're talking about is a drawing of the skull of President Kennedy as seen from the top? Would that be fair?

A Yes.

MR. GUNN: I'd like to ask the reporter if he could read back Dr. Boswell's last answer with regard to the transiting and the direction. When you hear this, I would like you to think if this is what you meant to say. I may have heard it differently from what you said, and I just want to make sure we're all on the same page.

[The pertinent portion of the record, as recorded, was read by the reporter.]

BY MR. GUNN:

Q Dr. Boswell, you've just had an opportunity to hear your prior answer read back. Was it correct that there was a wound that went from the left posterior to the right anterior?

Is that correct?

A Yes.

Q When you say the left posterior, what do you mean?

A The left occipital area, and that wound extends to the right frontal area. And what I meant was that the wound in the scalp could be closed from side to side so that it didn't appear that there was any scalp actually--scalp missing.

Q Okay. If you could--when you say the entrance wound, if you could give approximately the point of where that entrance wound is with reference to the diagram in Exhibit 2, and maybe just take as some sort of a reference point the 4 that is down at the bottom of that diagram. Was the entrance wound to the left or to the right of below where that 4 is? Do you see what I'm referring to?

A Yes. It would have to be a little bit to the right of where the 4 is and farther back than the 4.

Q In the autopsy protocol--

MR. GUNN: Let's go off the record.

[Discussion off the record.]

T2A

BY MR. GUNN:

Q Dr. Boswell, could you look at the top of page 4 of Exhibit 3 that I have just handed to you where it says, "Situated in the posterior scalp approximately 2.5 centimeters laterally to the right and slightly above the external occipital protuberance is a lacerated wound measuring 15 by 6 millimeters." Is that an accurate description of where you understood the entrance wound to be at the time of the autopsy, 2.5 centimeters to the right and slightly above the external occipital protuberance?

A Yes.

Q Let me ask you a question about Exhibit 3 as a whole. Have you seen the document previously that is now marked Exhibit 3?

A A long time ago.

Q What do you understand, just in a very general way, it to be?

A The autopsy report. I guess this was the initial

report.

Q Is that your signature that appears on page 6 of Exhibit No. 3?

A Yes.

Q Did you at any point ever change your mind about the location of the entrance wound in the skull?

A No.

Q Do you know whether Dr. Humes ever changed his position with respect to the location of the entry wound in the skull?

A I've had a lot of people tell me that he did, before the House Committee that he agreed to lower this wound.

Q You're referring to the skull wound in the back of the head?

A Yeah. But since I've talked with him since then, he denies that, and I think he now relies on this written report right here.

Q You're referring now to Exhibit 1?

A Yes.

Q On the top of page 4, the portion that I showed you

just a minute ago, it refers to a lacerated wound measuring 15 by 6 millimeters. What is the portion that is lacerated that is being referred to there? Do you know?

A I'm sure that is the tunnel-like wound of entrance on the scalp.

Q Now, going back to the diagram on page 2 of Exhibit 1, in the center of the diagram there are markings that appear to me to say right in the center 10 with arrows on either side, and 17 with arrows pointing up and down. Is that correct?

A Yes.

Q And below that 17 and the arrow, it says "missing." Am I reading that correctly?

A Yes.

Q Can you tell, was something that was 10 by 17 missing?

A No. The space measured 10 by 17, and there was missing bone there. But the missing parts were all fragmented, and there were irregular margins all around the space.

Q I guess the question would be: Were skull fragments missing from this 10-by-17 area space, or does this just mean that there were fractures in the skull from the 10-by-17 space?

A Most of that space, the bone was missing. There were a lot of small fragments attached to the scalp as it was reflected, but most of that space, the bone was missing, some of which--I think two of which we subsequently retrieved.

Q When you said that you subsequently retrieved, you were pointing at the figure at the bottom of the page?

A Yes. That was one of them.

Q So this is the portion at the bottom of the page that looks roughly half-circular with a notch on one of the sides of it?

A Yes.

Q Would that be correct?

A Right.

Q Where it says 10 by 17 missing, would that be referring to 10 centimeters by 17 centimeters?

A Right.

Q Right above the 10, there's a space where there's a marking that appears to say 19 centimeters or 19 cm. Is that correct?

A Yes.

Q What does that refer to?

A That's the--when the scalp is reflected, the space measured 19 centimeters at that level up there, just back behind the frontal bone.

Q Was there any laceration in the scalp that extended approximately 19 centimeters?

A No. The scalp had to be reflected for part of that area, but there was an incised wound up there that extended into the right eye socket and then back across his temporal and frontal bone.

Q So the 19 centimeters does not refer then to the length of the laceration--

A No.

Q --in the scalp?

A That was just the area of the space up there at that level.

Q Now, was that--I'm sorry I'm not understanding, but was that some kind of a fissure or a break in the bone that was 19 centimeters?

A The bone was all fragmented for that distance, 19

centimeters across the frontal bone.

Q Going up further on the diagram, there appears to be a "3 cm" right over what appears to me to be the left eye.

Is that correct? First, does that say "3 cm"?

A Yes. And that's not my writing. Either Jim or--and that doesn't look like his writing, so that may be Pierre. That apparently is the vomer bone, which is crushed and drawn up there. I don't believe that this is in the frontal bone.

Q When you say "this," you're pointing to the rectangular shape?

A To the little oblong 3-centimeter specimen there.

Q Do you know what the 3 centimeters is referring to there?

A I'm sure it must be--now, that is mine, that 3 centimeters is my writing, and that must be the length of the piece of bone there.

Q Does that signify a cracked bone or--

A Crushed, yeah.

Q Crushed?

A Mm-hmm.

Q Could you explain why, at least to me as a lay person, it appears that there is a rectangular drawing near what I would presume to be the area of the right--or the left orbit and it seems to be circular in the right orbit? Is there some explanation for that that you know of?

A Well, I remember that the fracture through the bone extended from the frontal bone and through the floor of the orbit. Why that is round and this one is square over here, I don't know.

Q In the center of the circle on the right orbit, it appears that there is a hook-shaped line that crosses through the center of the circle and then goes on to the front of that. Do you see that circle?

A Yes.

Q Does that signify a crack in the floor of the orbit? Is that the purpose of that line?

A Yes.

Q Do you see the writing that is over on the right side?

A Yes.

Q Can you read that?

A "Falx loose from sagittal suture"--"sagittal sinus from the coronal suture back."

Q What does that mean?

A Okay. The covering of the brain attaches in the center of the skull from front to back or back to front, but all along the top. And that's where the dura comes together on both sides and comes down around the brain. And that was loose all the way from front to back.

The two lobes of the brain are encased in a fibrous connective tissue membrane, and there's an external and internal one, and they come together and are attached all along the surface in the center, midline.

Q And so down that sinus that goes down from the frontal bone to the back, all of that was loose?

A Yes.

Q What was it in your understanding that caused that to become loose?

A Well, there was actually an explosion in his cranial cavity, and half of the right lobe of his brain disappeared through that cavity and loosened the surface of the membrane

there.

Q If we were to draw a line down the center of the skull right down the midline, how much of the skull to the left of that midline was missing, approximately? Or how could you describe how much was missing?

A Well, unless--I'm sorry. Your question was on the right side?

Q On the left side.

A The left side. Less than half of the space was denuded bone, because I think this was a loose piece over here that was still attached to the scalp.

Q You're referring to the--

A The one that's marked 10.

Q Over on the left side of the drawing.

A Right. So I would say that 60 or 70 percent of the space is on the right side, 30 to 40 percent is on the left side, where that bone has been removed.

Q One of my questions was going to be what the significance of that marking is on the left side with the 10 in the center, and from what I'm understanding you to be saying,

that was a piece of the skull that was loose. Is that correct?

A Fragmented from the rest of the skull but still attached to the scalp on its under surface.

Q Was that measurement made before or after the brain was removed?

A Probably before.

Q How did you make that measurement?

A I suspect that--well, I don't know. We had reflected the scalp, and whether or not this was measured attached to the scalp as it was reflected down or whether I measured it up here, I can't tell you that.

Q When you say reflected the scalp, you mean that you pulled the scalp completely off the skull so you could examine the skull from the outside? Would that be fair?

A Well, we actually folded it back below, because there--you don't have the photographs here, do you?

Q We'll be looking at them later.

A I think there's a photograph with this reflected down that I can demonstrate.

Q Okay. Down at the bottom of the drawing, there are

the numbers 4, 3, and 6. Do you see those?

A Yes.

Q What do those signify?

A Well, I think probably centimeters, since that 10, that looks like about a 10-centimeter piece of bone relative to the rest of these. And I think this is 4 centimeters by 3 by 6 centimeters.

Q Why were the dimensions taken of that piece?

A I don't think that those were parts of the fragments that came back. I'm sorry. I hesitate to speculate on that. I don't know.

Q Just one last point that I would like to just clarify in my one mind is: On the piece for the markings for the 10 by 17 centimeters that were missing, would it be fair to say that when you first examined the body prior to any arrival of fragments from Dallas, the skull was missing from approximately those dimensions of 10 by 17?

A Yes.

Q I'd like to ask you a question now about the thoracic wound that is on the right diagram, still in Exhibit 1. Do

you see that?

A It's not thoracic, though.

Q How would you describe it?

A It's neck.

Q Okay.

A Despite the position on the chart.

Q I'd like you to turn to page 3 of Exhibit No. 3, which was the autopsy protocol. I'd like you to look at the second paragraph down where it says, "Situated on the upper right posterior thorax just above the upper border of the scapula there is a 7-by-4-millimeter oval wound." Do you see that?

A Yes.

Q Could you explain to me what it means that the wound was situated on the upper right posterior thorax?

A Well, that's what the diagram is meant to depict. Posterior thorax--upper right posterior thorax would be there in that general area. But then the numbers indicate its position much better, and Jim wrote "just above the upper border of the scapula." Well, the scapula is this whole shoulder girdle here, and so it has to be up above here. And then it

says "14 centimeters below the tip of the right mastoid process."

Well, the mastoid process is not delineated on here, but it's just at the ear. So 14 centimeters really would be down here at the base of the neck.

Q I'd like to show you, continuing with this thing, Exhibit No. 6, which appears to be death certificate for President Kennedy signed by Admiral Burkley. The first question is: Have you ever seen this document before?

A No.

Q I'd like you to note on the second page where it says that--just read the first sentence to yourself, and I'll read it for the record. It says that "President Kennedy was struck in the head by an assassin's bullet, and a second wound occurred in the posterior back at about the level of the third thoracic vertebra." Do you see that?

A Yes.

Q Is that correct?

A No.

Q What vertebra was the wound closest to, if you know? Again, we're talking about the wound other than the skull.

A It would not be a thoracic vertebra. It would have to be a cervical vertebra.

Q Dr. Boswell, I'd like to show you Exhibit No. 22, page 2800, and draw your attention to one portion of that article that relates to what we're talking about now. If you look over in the third column on the right, the first full paragraph, if you could read that to yourself, please.

As I examine the photographs, the President's clothing, and other records, it appears to me as a lay person that the marking that you have made on the diagram on the right seems roughly to correspond to the other records; but it also seems as if you're suggesting that the diagram is incorrect.

A Right.

Q Is that right?

A Yes. When we saw the clothing, we realized that where I had drawn this was--if you looked at the back of the coat, it was in the exact same place. But the coat had been--was up like this. He was waving, and this was all scrunched up like this. And the bullet went through the coat way below where this would be on his body, because it was really at the base

of his neck. And the way I know this best is my memory of the fact that--see, we probed this hole which was in his neck with all sorts of probes and everything, and it was such a small hole, basically, and the muscles were so big and strong and had closed the hole and you couldn't get a finger or a probe through it.

But when we opened the chest and we got at--the lung extends up under the clavicle and high just beneath the neck here, and the bullet had not pierced through into the lung cavity but had caused hemorrhage just outside the pleura. And so if I can move this up to here--it's shown better on the front, actually. The wound came through and downward just above the thoracic cavity and out at about the thyroid cartilage. So if you put a probe in this and got it back through like this, that would come out right at the base of the neck.

Q When you say "a problem through this," you're referring to the entrance wound--

A I'm sorry.

Q --in the posterior part coming out the front?

A The exit wound in the front.

Q I'd like to show you a diagram that's marked Exhibit MI 13 and ask you if you've seen that diagram before.

A I don't remember it, but I--

Q I'll state for the record this is Warren Commission Exhibit 386 that was prepared by H.I. Rydberg to show the entrance wound in the back. Does that help refresh your recollection on the diagram?

A Yes.

Q If I understand you correctly, you have been suggesting that although the wound as depicted on the diagram in Exhibit 1 may look more as if it's thoracic, you are arguing now or your statement of clarification now would be that it's more in the neck wound. Does the drawing in Exhibit No. MI 13 better demonstrate to your mind where the actual entrance wound was?

A Exactly. Yes.

Q Is it your sense that Exhibit MI 13 is reasonably accurate for showing the location of the wound entrance to the neck?

A Yes.

Q Dr. Boswell, I'd like to show you a document that's been marked Exhibit 44, which, for the record, is a report prepared by FBI Special Agents O'Neill and Sibert, dated November 27, 1963. Agents O'Neill and Sibert were at Bethesda on the night of the autopsy.

Dr. Boswell, I'd like to show you page 5, the paragraph beginning "On the basis of the latter two developments." Could you read that paragraph to yourself, please?

[Pause.]

BY MR. GUNN:

Q Dr. Boswell, have you had an opportunity to read that?

A Yes.

Q Do you know who Agents O'Neill and Sibert were?

A Yes.

Q Did you ever talk to them?

A No.

Q Do you see anything in the paragraph that you just read that you now understand to be incorrect?

A Yes.

Q What is it that you understand to be incorrect in

that paragraph?

A Well, it's not totally incorrect. I'm sure he overheard us, while we were dissecting, making comments and discussion and so forth, and there was a time at which point we had seen the X-rays and were looking at the wounds and saw that there were no whole bullets left in the body. And one of the possibilities early in the investigation was that that bullet had gone in there and worked its way out or was still there or something. By X-ray it wasn't there, so it had to have gone someplace. And we had the bullet wound of entrance.

We didn't yet have the bullet wound of exit. We had the tracheostomy wound in the front, but no other place. And so we were just contemplating whether that had gone in and had not come out until they had done some manipulation on him and that it might be on his stretcher or something.

Well, they did find a bullet on the stretcher, but not that one.

Q So would it be fair to say that although Sibert and O'Neill's statement that the doctors believed that there may have been an entrance wound in the back and the bullet worked

itself out during the course of treatment, that although that may have been speculation at one point during the autopsy, that was abandoned by the conclusion of the autopsy?

A True. That's true.

Q So this would be almost as if the agents were present at one point, they left the room, and that that was their conclusion based upon something that had occurred partway through the autopsy?

A Yes. They were reporting this stuff by telephone at the time we were talking.

Q Do you know to whom they were reporting it?

A I have no idea.

Q Did you ever, in terms of probing the wound either in the skull or in the neck, did you ever calculate the angle at which the bullet had entered the body?

A No. We couldn't.

Q Let's go back, if we could, to the location of the entrance wound in the skull. Could you tell me whether the entrance wound that you identified in the skull was something that appeared like a puncture in a bone with the remainder of

the bone surrounding the hole? Or did the hole break off such that you would need other pieces of bone to be brought into place to show the entire periphery of the wound? I'm not sure that question made--

A Yes, I understand it, and I think--I think maybe photographs that we have explain it. I believe that there was an area of bone intact down here that we could attach this to.

Q Let me just state for the record you're referring now to the second page of Exhibit 1, and when you say "this," you're referring to the small fragment at the bottom of the page. Is that correct?

A Yes.

Q Okay.

A And the beveling is such on both the wound here--or the remaining bone that is someplace in this area, but not shown in this diagram, and in this piece which, when put there, shows the approximate dimensions of the wound, and the beveling on the bone shows entrance and exit.

Q So when you say "this wound which was placed there," just because that won't necessarily be clear on the record,

when you say "this wound," you're referring to the diagram at the bottom of the page and suggesting that that would be placed into the larger diagram towards the bottom?

A Approximating a piece of bone which is not demonstrated or diagrammed here.

Q Okay. So do that mean that it was your understanding that the piece of bone that is drawn at the bottom of page 2 is showing part of the entrance wound in the back of the skull?

A Yes. Actually, that Rydberg drawing that you showed me earlier may--

Q Exhibit 13?

A Yes.

Q MI 13?

A Now, this is not--this is contrary to my arrow here, and I don't know why, because it shows the tunneling going to the right rather than to the left.

Q When you say "this," you're pointing at Exhibit MI 13 and to the ovular wound in the skull; is that correct?

A Yes.

Q Okay. And you're saying that the wound that is

depicted on MI 13 is proceeding in a different angle and direction from the one that you have marked on Exhibit 1--

A Right.

Q --in the diagram on the right. Is that correct?

A Yes. And I don't know why that is depicted in that manner, unless they decided that--the artist decided that that went that way. But, anyway, this piece of bone right here--

Q You're referring to the bottom of page 2 on Exhibit 1?

A Yes, should fit right here.

Q Now, you're saying that it should fit right over the top of the ovular wound that is on MI 13?

A Right.

Q So would it be fair to say, then, with the drawing on MI 13 that there is a piece of bone that has been replaced into the skull before the drawing is made? Would that be fair?

A Well--

Q The drawing as it's depicted in MI 13 is not how the skull appeared when the autopsy began?

A Well, this is really the--really the scalp. This

is as though the scalp were intact and everything. This is not meant to depict the bone and bone fragments, except for this defect here.

Q So MI 13, with the exception of the black portion up at the top right, does not depict any of the skull wounds. Would that be fair?

A Right, except the wound of entrance here.

Q Except the single wound of entrance.

We have been referring to page 2 of Exhibit 1 in the small diagram at the bottom. Is the bone that you have drawn there the sole fragment that separates the entrance wound in the back of the President's head from the large fragment that is missing at the top right of the head?

A I seem to remember two pieces, two fragments, and I seem to remember a photograph or a drawing depicting two fragments. And I don't know--I think the other one is even larger than this, and I don't know where it came from.

Q When you say the other fragment is larger than this, the "this" is the small diagram on page 2 of Exhibit 1?

A Right. I think that this came in like halfway through

the autopsy, and then sometime during the night the other piece came in, and we still have--there it is, I believe. These are X-rays.

Q Dr. Boswell is now being shown Exhibit MI 15, which are X-rays taken of fragments arriving from Dallas during the course of the autopsy.

A And I think this is an X-ray of this piece showing the wound of entrance there, part of it.

Q You're now making a connection between the medium-sized fragment on MI 15 and comparing that to the drawing at the bottom of page 2 on Exhibit 1; is that correct?

A Yes.

Q Dr. Boswell, I'd like to show you Exhibit No. 74, which is a three-dimensional plastic model of a human skull. Do you see that?

A Yes.

Q I would like you, if you would first for me, just to point to where on the skull, to the best of your recollection, was the entry wound in the skull.

A Someplace here. It had a measurement--okay.

Q You're referring to page 4 of Exhibit No. 3, which is the autopsy protocol.

A I don't know where...I don't know where our measurements are for the skull wound, but it says 2.5 centimeters laterally to the right, slightly above the external occipital protuberance.

That's about as good as I can--

Q Okay. Could you make a mark? I understand that this is going to be somewhat approximate, but your best marking of where that occasion is for the entrance wound.

Okay. Now, I'd like to go back to Exhibit 1 on the second page and have you mark the approximate dimensions of the 10-by-17 portion of the skull that is missing. Let me ask maybe just one question first. The 10 by 17 was the measurement taken as if the full direction of the skull were in place, or would it be, that is, going in a curvular--or in a curve, or would it be a straight line through the wound?

A I think the 10 by 17 was a straight line, and then the 19 was a curved line at the--

Q Does it make sense to remove the top portion of Exhibit

74 to take the measurement, to give an approximate--

A I think that will be all right. Work on this a while.

See, most of this was gone, and so the distance is going to be actually across here, and that's almost all the skull. This is almost an impossible task.

It's an adult skull?

T2B

Q Yes. While you're doing that, let me try a question.

Would the measurement for the 17 centimeters begin at the entrance wound and go forward?

A I think it goes--it's right here, yes. And that's why this is almost impossible to do.

Q I understand it's a difficult--I mean, and we'll just treat this as being, to some extent, approximate. But just the best that you can do.

Let me try one question while you're doing that. When you made the measurement on the night of the autopsy, what kind of measuring device did you use? Would it have been a straightedge?

A Straightedge.

Q So not a tape or a cloth tape?

A No, no. Straightedge.

I'm having an awful hard time. This is almost the dimensions of this, although this--

Q Just so it will be clear on the tape, you're saying the two dimensions are--the points that you have made on the plastic skull are approximately the same as the dimensions on the drawing in Exhibit 1?

A Yes, and I can't--I can't fit a 19-centimeter margin into this.

Q Into the cranium of the plastic skull.

A Into the base of the cranium. This really should be right above. It should be all the way down here.

Q When you say this should be down here, you mean--

A This last, the most posterior mark, because this comes across like this.

Q But that's fine. You should just go ahead and draw that one. And, again, I understand that this is approximate and it's a difficult task.

A And then this comes around like so. And that is very crude. That's about the space that we're talking about, though,

with approximate measurements.

Q Okay. What I'm going to do, if this is all right, is to call this Line 1 on Exhibit No. 74. I'll draw a 1 in a circle to signify that the line going across the top of the skull is the portion, if I understand correctly, of the skull that was missing when you first began the autopsy. Is that correct?

A Right.

Q Now, I'd like to ask you to describe for me just in words as best you can what portions of the scalp were missing when you first began the autopsy?

A Actually, very little. This drawing is somewhat deceptive, but there was--

Q When you say "this drawing," you're referring to MI 13?

A MI 13, in that we were able to--the morticians were able to cover this defect completely by using some sort of plastic to cover the brain cavity, because there wasn't much bone to replace the brain cavity. But they were able to use his scalp to almost completely close the wound.

Q So it would be fair to say that although there was a very large piece of skull missing, there was very little scalp missing?

A Right.

Q Do you recall whether there were tears or lacerations in the scalp?

A Right across here and--

Q Approximately across the midline?

A What I previously described, post-occipital, and on the left, across the top, and then down to the right frontal area, and then the laceration extended into the right eye.

Q Okay. Could you make another drawing--and we'll put Line No. 2 on this--to show the approximate direction of the large laceration that you just referred to?

A Well, it's not a--I can't say what direction, but--and then this came on down like so, and--actually, I think it came right into here.

Q Okay. I'm going to put a 2 in a circle right next to that line, and the 2 will signify the approximate direction and shape of the large laceration. Would that be fair?

A Mm-hmm.

Q During the course of the autopsy, did any skull fragments, in addition to the three that you've already shown on the X-ray drawing, come to the autopsy room?

A No.

Q Just those three?

A Well, I'm not sure all of them came in that night. Probably just this one. And then the other two I think came later. I know we had them by the time we examined the brain.

Q When you say "just this one," you're referring to the drawing on the bottom of Exhibit 1; is that correct?

A Yes.

Q Did you have skull fragments with you at the time of the supplementary examination of the brain?

A Yes.

Q How many fragments did you have, as best you recall?

A I think there were three.

Q Do you know whether those fragments were X-rayed at about the time of the supplementary examination?

A I'm sure they were.

Q Did you see them being X-rayed during the supplementary examination?

A I don't know.

Q Did you see any X-rays of the three fragments during the time of the autopsy?

A One.

Q Just one?

A The one piece that's on that diagram here.

Q When you first saw President Kennedy's head, was there any brain tissue that was extruding from the hole in the top of the head, or was it all roughly within the cranium?

A I'm sorry. I can't--I don't remember that.

MR. GUNN: Let me go off the record for a minute.

[Discussion off the record.]

[Recess.]

AFTERNOON SESSION

Whereupon,

DR. J THORNTON BOSWELL

resumed the stand and, having been previously duly sworn, was examined and testified as follows:

BY MR. GUNN:

Q We have now taken a lunch break, and I would like to go back to the exhibit, the skull that is marked as Exhibit 74. I'd like to ask you, Dr. Boswell, if you could give me just your own assessment of how the dimensions of the skull that we have here compare, again, in just a very general way, to the skull for President Kennedy.

A The marks that I've made are really very approximate to the dimensions that are in our written report. And the skull is probably smaller than President Kennedy's, and the marks that we've made on the skull are very approximate.

Q Would it be your impression that, first, the markings that are contained in the face sheet, Exhibit 1, and in the autopsy protocol are accurate?

A Yes.

Q So those are accurate. And would it be fair to say that the markings that you have put on the skull are approximate dimensions based upon what you considered to be the accurate markings that are in the autopsy protocol and the face sheet?

A That's true, and these really only indicate sort of the magnitude of the wound and the approximate position of it.

Q And would you say that the drawings that you have made on the skull are roughly proportional to the size of the skull rather than the actual centimeter marking?

A True, true. That's good.

Q Dr. Boswell, I'd like to talk to you about the order of procedures as they took place on the night of the autopsy.

We have discussed already the arrival of the casket and the removal of the body. I'd like you now to tell me what the first procedure was that was performed in terms of the examination of President Kennedy.

A The external examination was done first, and as soon as the body had been examined, the photographer was brought in and various photographs, external photographs, were taken, at which point we then backed away and permitted the radiologist

to X-ray the entire body, and then we began further external examination and dissection while awaiting the development of the X-ray film. Then the wounds of entry and exit were studied preliminary to an examination of the abdominal and thoracic cavity. The neck wound was determined--its direction and dimension was determined after we had opened the thorax and been able to review the right thoracic cavity, which was the midpoint of the wound.

Q When was the wound on the back of the body first located? Was that right at the beginning of the autopsy, or did that come later in the autopsy, the wound that you've described as the neck wound?

A That was recognized fairly early in the autopsy because that--we began studying that first trying to determine if a bullet was present.

Q With respect to the photographs, was anything done to the skull or to the hair to prepare it for the photographs?

For example, was the hair cleaned at all? Was the hair parted in any way or any skull fragments put in before the photographs were taken?

A Well, photographs were taken at various stages. The scalp was pulled forward in order to demonstrate the wound of entrance. And then the scalp was reflected to show the magnitude of the wound and more or less the direction of the bullet, and then to remove the brain.

Q Just so I'm clear--and we'll be looking at the photographs in a few minutes, and you can maybe clarify it there.

But at least with some of the photographs, is it your testimony that the scalp was pulled in a way different from how it was when you first saw it in order to better illustrate either wound of entry or exit?

A Yes. The scalp was essentially loose. In the usual autopsy, you have to cut underneath the scalp in order to reflect it. In this case, the scalp was mobile so that you could pull it forward to obscure the wound or pull it back to make the wound completely lucid.

Q Okay. Was the hair cleaned in any way for purposes of the photographs?

A No, I don't think so. There was not a lot of blood, as I remember, and I think he had been pretty well cleaned up

in the operating--in the emergency room. And I don't think we had to do much in the way of cleansing before we took photographs.

Q Were any skull fragments put back into place before photographs or before X-rays?

A I think before we took the--the ones that came from Dallas were never put back in except to try and approximate them to the ones that were present. But I think all the others were left intact.

Q So, for example, was there a fragment that had fallen out at any point that you then put back into its place before a photograph or X-ray was taken?

A Yes.

Q What size fragments and where did you place them at the--

A Well, the one that's in the diagram on Exhibit 1, that 10-centimeter piece I'm sure was out at one time or another.

And I think maybe some of these smaller fragments down at the base of that diagram also were out at one time or another. But those were all put back.

Q Okay. And you're referring to page 2 of Exhibit 1?

A I'm sorry. Yes.

Q Was a Y incision ever made on President Kennedy?

A Yes.

Q Would you look at page 4 of Exhibit 26, which, again, were the notes taken of your interview with HSCA members?

A The second paragraph?

Q The first full paragraph, down at the last few sentences.

It appears to me that this is reporting you to have said that a Y incision was not made. Was that recorded correctly, or do you recall now whether there was a Y incision?

A Well, there would have to be a Y. This was misunderstood. We went into the chest first, and then the Y incision was extended.

Q So when you say "this was misunderstood," you're referring to the phrase in the document Exhibit 26 that says there was no Y incision?

A Said they didn't do a Y, but we examined the chest first and then we ultimately extended the incision to a Y and

went into the abdomen.

Q Could you look at the first sentence of the following paragraph that begins, "Dr. Boswell indicated that we had gotten ourselves in Dutch with the neck and throat wounds with regard to the Secret Service"? Do you see that?

A Yes.

Q Does that seem accurate to you in terms of recounting what you said?

A Yes.

Q What did you mean by gotten yourself into Dutch with the Secret Service?

A Well, that they were reporting things and some of the things that they told people became public and they just hadn't gotten the entire information.

Q So how was it misreported or--

A There was some question you asked me earlier that they had--oh, it was about the probing of the wound, and they said that we probed and couldn't find it and thought that the bullet must have been knocked out while--during the resuscitation. That was the sort of thing that was happening

while they were on the phone.

Q Did the Secret Service ever come and talk to you about that during the course of the autopsy or subsequently about that issue?

A No.

Q Did you understand that the Secret Service was displeased in some way with anything to do with neck or throat wounds in the autopsy?

A No. Those people were in such an emotional state that they were running around like chickens with their heads off, and we understood their problem. But we never talked with them directly. They misquoted an awful lot of things that we said or did.

Q Let me ask you a question from the autopsy manual. This goes to the Y incision. I'd like to have you look at the diagram on page 5 which shows the incisions. Could you describe whether the Y incision on President Kennedy followed that marked on Exhibit 5 or whether it differed in some way?

A Well, initially, we did this because we were only going to do a thorax.

Q You mean the incision that would go right below the nipples?

A Right.

Q From the armpits underneath--

A Actually down just above the diaphragm. Beneath the nipples and just above the diaphragm. But then when we were permitted--see, I was trying to find the adrenal glands through the diaphragm from above.

Q So it's just the top part, the semicircular part, without opening anything down to the--

A Right.

Q --middle of--

A With it open like this, you can get down--you can get the lungs and the heart, get the neck organs and so forth out. But you can't get down into the liver and stomach and so forth. So I was trying to palpate through the diaphragm the adrenals, and I couldn't find them because he didn't have any. And so we talked to Burkley at some point, and we were able to go in and get the kidneys out where the adrenals sit on top of.

Q So you made a vertical incision that would come down from the sternum--

A Right.

Q --down--

A Exactly.

Q At what point during the autopsy was the brain removed?

A I can't be sure, but I think that we did the brain first before we did the dissection of the thorax and abdomen.

But I can't be sure about that. I mean, normally, it would be the last thing to be done. But since it was the prime thing in the autopsy, I sort of have a feeling that we did that first.

But I won't say for sure.

Q Was it necessary to make any incisions in the scalp in order to remove the brain?

A No.

Q Was it necessary to saw any of the bones in the cranium?

A No.

Q Who was it who removed the brain?

A I think Jim Humes did, but I can't be sure of that.

Q Do you recall whether there were any difficulties in conjunction with removal of the brain?

A No.

Q Do you recall whether it was particularly easy to remove the brain?

A I think it was a routine procedure. In Dallas, they had said that the cerebellum was the part of the brain that was injured and exuding. But they were wrong because the cerebellum is enclosed in a dural sort of compartment, and in order to get the cerebellum out, you have to cut the dura around, and then you--that's the only hard part about getting the brain out. And the manner in which we were doing it, both the cerebral hemispheres were already exposed without dura, and it was really very simple to take out.

Q During the course of the autopsy, did you have an opportunity to examine the cerebellum?

A Yes.

Q And was there any damage to the cerebellum that you noticed during the time of the autopsy?

A No.

Q So both the right and left hemisphere of the cerebellum were intact?

A Yes.

Q Was the tentorium damaged at all?

A No.

Q Do you recall whether Colonel Finck arrived before or after the brain was removed?

A Oh, before.

Q Do you remember in terms of the general chronology of events when the skull fragment or fragments arrived? Was that very late in the autopsy? Do you recall?

A I think like midway. The one. I think the others came after we had finished.

Q Okay.

A Or maybe toward the end.

Q Drs. Finck and Humes have both referred to the arrival. Dr. Finck said close to midnight, and Dr. Humes said, "I wouldn't wish to guess, but I would have guessed it was midnight or 1 o'clock in the morning." Does that seem to you

to be approximately correct? Or would your memory be that it was earlier?

A Oh, I think it was midnight.

Q Dr. Boswell, were you present during the time President Kennedy was embalmed?

A Yes.

Q Did you participate in that at all, or did you just observe?

A We just observed.

Q Did the skull fragment arrive prior to or after the beginning of the embalming?

A Prior to.

Q Was the fragment placed into the cranium in the course of the embalming?

A No.

Q Was it kept separate from the body?

A Yes.

Q Who took possession of that fragment, if you recall?

A I think it was retained with the brain in Smoky Stover's office. It was put in his closet, in the closet of

his office, and locked up that night. And then I would assume--but I don't know--that the bone fragments went with all the rest of the material down to the White House, although it may have been kept by the Secret--or by the Warren Commission.

I'm not sure.

Q Is there a standard procedure, the best you know, for keeping fragments of bones or skull with the body or not with the body when there is a--when it is a forensic case?

A Usually that's part of the forensic material that's retained for courts and trials and so forth.

Q So it would be your understanding it would be a normal autopsy procedure, normal forensic autopsy procedure, to keep certain parts of the body as evidence for potential trial?

A True.

Q I'd like to shift the direction a little bit now and talk to you about records. The first question would be: Who during the course of the autopsy took any records or notes that you recall?

A I think Jim Humes and Bob Karnei, who was our senior resident working with us that night, and myself did all the

note-taking. And then Jim took all our collected notes with him to write up the autopsy.

Q Did he take them on the--I guess very early on the morning of the 23rd, or did he take them later?

A He took them with him home at midnight. Smoky called us--Jim took the bucket with the brain and whatever else--we had the tissue samples for microscopy. We took all that up to our offices and into Smoky's office, and at that time, it was thought that there was some sort of a cabal and that some--you know, anybody was likely to be killed, Johnson or anybody else.

And Smoky says, J, you take Jim home. So I got in my car behind Jim Humes, and I followed him home. And then I went home, and he stayed up the rest of the night writing up the autopsy.

Q When did you first see a draft of the autopsy?

A The next morning.

Q Approximately what time?

A Ten o'clock.

Q What were the circumstances when you saw it? Did you go to his home, or was it at the hospital?

A I went to the hospital.

Q Was the first draft, do you recall, handwritten or typed?

A Well, he had written--he had handwritten one, and then he rewrote it. And I don't know whether I saw that or--I think maybe it was typed before I saw it. I don't think I ever saw a handwritten copy.

Q Now, is it--well, did you see a version of the autopsy at about 10 o'clock at the hospital--

A Yes.

Q --on Saturday? And that one was handwritten?

A No. That--

Q That was typed?

A I'm almost sure that was already typed.

Q Now, was it your understanding that Dr. Humes wrote a handwritten version immediately after the autopsy and that he then wrote a subsequent draft, handwritten again, and that one was subsequently typed?

A Yes.

Q That's the chronology that you understand?

A Right.

Q Did you ever talk to him, that is, Dr. Humes, about the contents of the first draft of the autopsy?

A No.

Q Do you know whether he spoke to anyone about the contents of the first draft of the autopsy, such as Captain Stover?

A He's talked to an awful lot of people about that.

Q I don't mean after the fact, but I mean--

A I mean investigating committees and all sorts of people, because he burned--I don't know why that wasn't burned, but he--

Q You're referring to Exhibit 1?

A Yeah. He--anything with blood on it--and that obviously had blood on it. It's watermarked. He was working on a card table in front of his fireplace, and he was throwing drafts and redrafts and so forth into the fireplace. And he's described that to many people.

Q Do you know whether he talked--my question does not go to subsequent investigations, but contemporaneously at the time he was writing it, do you know whether he spoke to anyone

about the contents of the first draft prior to the second draft?

A I'm not aware of anybody.

Q Did you ever see the notes that Dr. Humes took during the course of the autopsy?

A No. I'm trying to think what notes he might have taken. I don't see his handwriting on that.

Q You mean Exhibit 1?

A Right. I don't think I saw any of his notes.

Q Do you have any recollection of seeing Dr. Karnei's notes you previously mentioned?

A I think that maybe Karnei may be the one who wrote those measurements on Exhibit 1. What else he may have written on it, I don't remember.

Q Did Dr. Humes ever return to you personally Exhibit 1 or any other notes that you took?

A No.

Q Did you take any notes yourself other than what is contained in Exhibit 1?

A No.

T3A

Q Did you see anyone else at Bethesda taking notes other

than yourself, Dr. Karnei, and Dr. Humes?

A No.

Q For example, FBI agents or Secret Service?

A I didn't see anybody writing.

Q I'd like to ask you about the kinds of records that would typically be generated in the course of an autopsy at Bethesda in the 1960s. So in addition to notes that may have been taken by doctors or prosectors during an autopsy, were there, for example, audiotape recordings of autopsies?

A No.

Q Have you ever heard of any audiotapes ever being made of autopsies?

A Oh, yes.

Q Do you know when those started in relationship to 1963?

A Oh, at least when I started my residency in the '50s--'52, '53. We were using audiotapes in those days.

Q But you don't know of audiotapes having been used at Bethesda?

A We did occasionally. We were training residents

there, and we usually would take the long road. But recording with audio was done.

Q Was there any reason that there was not an audio recording of President Kennedy's autopsy that you know of?

A Well, probably a number of reasons. Certainly with the number of people and the noise in there, it probably wouldn't have been a good idea. But when you have three prosecutors plus so many other people working, it would not have worked.

Q Did you ever hear any discussion about whether there should or shouldn't be an audiotape made of the autopsy?

A That's one thing I've never heard anybody complain about.

Q Was it ever the custom or practice to have somebody take minutes or notes of proceedings of an autopsy?

A Always.

Q Was there somebody who did that?

A Well, basically I was taking the notes, for the most part.

Q And by those notes, you're referring to Exhibit 1?

A Right.

Q Was it ever the practice, as far as you're aware, to have someone like, we'll say, a full-time stenographer or something of that sort taking more comprehensive notes than Exhibit 1?

A We didn't do that at Bethesda. There are pathology departments that have done that for years.

Q And as far as you recall, there was no person who did that for President Kennedy's autopsy?

A True. That's right.

Q Were there any kind of records that were created to, for example, log the receipt of the body or the departure of the body?

A Yes.

Q How would those be recorded?

A There was a morgue log book that I'm sure would have recorded the receipt and disposition of the body.

Q Does that have any other name other than morgue log book that you're aware of?

A That's all.

Q That would be the correct term for it.

Were there any similar logs for receipt of organs or tissues or sections? How would those be recorded or tracked?

A If they're brought into the morgue at a time other than when the autopsy was going on, they would be put in the log book.

Q Would that be the same as the morgue log book?

A Yes.

Q So let's suppose that several sections were made from the brain and they were taken out for examination.

A Oh, in that--no. We had regular sessions with people either coming to the morgue for organ reviews or brain examinations and stuff like that. And they occasionally would take parts back with them to the AFIP or wherever they came from. But I don't think usually those are logged in or out.

Now, those people taking those away probably would render a report. So a report would have been sent back to us that that sample had been removed a certain day, certain examinations were done, and the results are reported herewith, that sort of thing.

Q Did you ever see any documents like that for President

Kennedy?

A No.

Q Do you know whether there were ever any such documents created?

A No, because all the materials that we took out of the body were processed and returned to the White House, and our supplementary report reflected all the work that was done.

Q Did anyone other than Dr. Humes have any responsibility for conducting microscopic examination of the tissues?

A I think I did that.

Q Okay. I'd like to show you a document, Exhibit 4, and see if that helps with your recollection. I'll state for the record that's the supplementary report of autopsy of President Kennedy.

A These are Jim's description. Now, what was your question?

Q Just who performed the microscopic examination or any other of the examinations on the tissues?

A Well, Jim Humes and I did the brain. I see he has

described the microscopic. I also went over those slides.

But these are his description.

Q You're referring now to Exhibit 4?

A Yes.

Q I'd like you to look at Exhibit No. 26 on page 8.

This, once again, are staff notes from the interview of HSCA.

I'd like you to read the paragraph beginning with "Dr. Boswell said the tissue people." If you could read that through the end of the paragraph, please?

[Pause.]

THE WITNESS: Okay.

BY MR. GUNN:

Q Is that paragraph a reasonably accurate--

A Yes.

Q --recording of your recollection?

A Mm-hmm.

Q So when you say tissue people were given the tissue, whom were you referring to?

A The people that prepare the slides. At autopsy, you cut out small samples of all the organs, and the margins of

things like the bullet wounds of entry and that sort of thing, and then after that's fixed for a while in formalin, you take smaller pieces of those, and then that is processed for dehydration and infiltration with paraffin. Those are put in paraffin blocks, and then sections are made to be examined under the microscope, stained and examined under the microscope.

So, actually, I gave those to the people at midnight, or earlier, probably 10:30, 11 o'clock at night, and they processed those that night. And when I came in the next day, they were ready for me to examine.

Q Was there any record created of the transfer of the tissue from you to the testing personnel and then back? Or was that done without records?

A Well, that's done without records. An autopsy is given a number, and then this--I don't see the number here, but, anyway, they--here it is. And then all the tissue is processed with that number, and there are so many tiny pieces, and they require a little tag that's put through with them. And that's in an autopsy log in the laboratory separate from the morgue log, and that number and the patient is logged in.

And then there are logs probably in the secretary's part of the laboratory where they type this up and that's--this number and name is put in their records.

Q So that you would expect there to be some kind of log book that would show the receipt of the sections, the testing, the results of the test, and then sending the--

A Yes.

Q --sections back? Now, in the paragraph that I showed you a moment ago from page 8 of Exhibit No. 26, it refers to this, the sections being available from around noon on the 23rd; is that correct?

A Right.

Q So that would have been Saturday at approximately noon?

A Yes.

Q Now, previously you mentioned that it was your understanding that Dr. Humes had a draft of the autopsy protocol that was available about 10 o'clock that morning; is that right?

A Yes.

Q And do you remember that the draft was available prior

to the time that the sections had been returned from tests?

A Yes. But the microscopic wasn't part of the draft.

Q Exactly. Sure.

Were you present when the results of the testing were dictated?

A No.

Q Do you know when the dictating took place on the microscopic sections?

A No.

Q Do you know, for example, whether that was on the 23rd at approximately the time they were received, or later?

A We looked at the slides together Saturday around noon. But he had not dictated the autopsy at that time.

Q I mean the supplementary report for--

A Well, I'm not sure he had dictated any of it at that time. He had handwritten out the gross autopsy. And maybe I--I might have reviewed with him his handwritten draft at that time. I can't remember that. But at some time we went over it together, because I'm sure we discussed points and made changes and so forth. But that was done Saturday early

afternoon.

Q Okay. Was anyone else present when you examined the sections around noon on the 23rd? For example, was Dr. Finck there?

A He was not there.

Q Was Dr. Karnei there?

A He was probably there, and probably others of our staff.

Q Did you conduct any examination of the brain at that time?

A No.

Q Was a section made of the wound of entrance on the neck or back?

A Both.

Q Do you recall what the results of that--was there a subsequent testing of the back/neck wound?

A Other than the microscopic?

Q Yes.

A No.

Q Do you recall whether the results of that test were

recorded anywhere?

A Yes. I think they're here.

Q Could you show me where that is located, the microscopic examination of the--

A On page 2 of Exhibit 4, at the bottom of the page, skin wounds. It describes the sections taken through the margins of both the skin wounds.

Q And do you see the reference there to the coagulation necrosis?

A Yes.

Q Can you tell me what that signifies?

A Like burning.

Q And did that have any bearing on determination of whether that was an entrance wound?

A No. The size and configuration of the entrance wound are the two most important things.

Q Did you see any written results of tests on any of the tissues of President Kennedy, other than the document that's in your hand now, Exhibit 4?

A I'm sorry?

Q Did you see any written reports of any tests performed on any of the tissues from President Kennedy's body, other than Exhibit 4, which is in your hand now?

A No.

Q Prior to the time that you signed the autopsy protocol, which is Exhibit 3, did you discuss the substance of the autopsy with anyone other than Drs. Humes and Finck?

A Well, I'm sure my wife. She had been staying up all night waiting for me to get home. There was a--the neuropathologist at the AFIP was home when I got there, and I think I probably discussed some of it with him, some of the evening's events and so forth.

Q Do you remember the circumstances when you signed the autopsy protocol, Exhibit 3? Do you remember what day of the week it was or time of day?

A This was done on Sunday, wasn't it?

Q It's not dated. You're referring to Exhibit 3?

A Yes. I'm almost sure that this was executed on Saturday or Sunday, because Jim took it down to Admiral Burkley. I can't be positive at this moment.

Q At the time that you signed this, was anyone else in the room with you? Do you recall? "This" being Exhibit 3.

A Yes. I think that Pierre Finck, Jim Humes, and Smoky Stover and I were in the room. Yeah, I think we were the only ones there at the time we signed it.

Q Was there any discussion that you recall about anyone wanting the autopsy protocol to read one way rather than another or any changes that were being asked to be made to it by anyone?

A No one from outside, and Jim and Pierre and I went over it quite carefully item by item and discussed everything in it, as to contents and accuracy and so forth. I do remember that we spent quite a bit of time just preliminary to signing it.

Q Was there any discussion at all about someone from outside of that group wishing to make any changes or alterations to the autopsy protocol?

A None.

Q Did you ever sign more than one version of the autopsy protocol? For example, was there one draft that was written

that you signed and then subsequently made a decision to make changes?

A No.

Q There was just one version.

Previously in the deposition, you've made reference to there being a probe to help track the direction of the neck wound. Do you recall that?

A Mm-hmm.

Q Could you tell me about how long the probe was or describe the dimensions of the probe?

A It's a little soft metal instrument that looks like a needle with a blunt end on one end and a flattened end on the other, like a needle that you would knit with or something. And it's, I would say, eight inches long, blunt on one end and sort of has a sharp point on the other end.

Q Were there any X-rays taken with the probe inside the body that you recall?

A No.

Q How far in did the probe go?

A Very short distance. Three inches, about.

Q Were there any photographs taken with the probe inserted?

A I doubt it.

Q I believe from your earlier testimony you said that you were present for the subsequent supplementary examination of the brain. Is that correct?

A Yes.

Q Who else was present for that examination?

A I can't be sure about this. I am sure that Jim and I were there. I think probably Pierre was not, but I think the neuropathologist from AFIP, Richard Davis, was there. And then I'm sure much of our medical staff from the laboratory, I think they probably all would have been there.

Q So there were quite a number of people there?

A Yes.

Q Just in a rough way, is this between 6 and 12 or approximately how many?

A I would say probably 15, maybe. It was President Kennedy's brain.

Q Do you remember whether anyone named Stringer was

present?

A Yes. He was the photographer.

Q Did he take photographs at that time, as best you recall?

A Throughout the autopsy and the subsequent brain examination. I was thinking about that last night, and he had an assistant or two. They train people in medical photography.

And I'm not sure if he was present throughout all this or one of his assistants. I'm almost positive he was there throughout the autopsy. The same is true of the radiologist. He had residents and assistants also, and I know there were at least a couple of radiology technicians moving film about and so forth.

Q Were any of the radiologists present during the supplementary examination of the brain?

A I doubt it.

Q Do you recall Dr. Humes ever having made reference to Admiral Burkley's desire that the brain be interred with the body?

A No.

Q Do you recall ever having heard anyone discuss the

issue of whether the brain should be interred with the body?

A I'm sure that in years past that discussion has come up, but I can't remember who and where.

Q In addition to the supplementary examination of the brain that we've been discussing and the examination of the tissues from around noon on the 23rd, did you participate in any other supplementary examinations of tissues related to President Kennedy?

A Not at that time.

Q When did you at some other time?

A When the material was returned to the Archives.

Q Okay. When you say "when the material was returned to the Archives," you're meaning two or three years--

A Slides--yes.

Q During the time that the material was returned to the Archives, what do you remember there being in the way of, I will call it, biological material, anything related to President Kennedy's body or tissues?

A Slides, microscopic slides. And I can't remember if there were paraffin blocks. I believe there were paraffin

blocks, but I'm not sure. Then, of course, photographs and X-rays. And I can't remember whether--those bone fragments may have been within the--are they still in the archival material? They're not? At some point they were. I think I saw them at the Archives at some point.

Q Okay. Other than the subsequent examination at the Archives, is it your testimony that you only participated in examinations of the tissues at two times after the initial autopsy? Is that fair?

A We went down and--when the material first came back, we went down--Jim Humes, Stringer, and the radiologist, Dick somebody or other, and I--and we went through all the material and numbered it and signed it and logged it back in. And then that group of physicians, we asked for pathologists and radiologists, and I guess there were all kinds of people in that group. We went through it again with them that time. Then I think that was the end.

Q Okay. So just in terms of the time around the autopsy, there were no other opportunities that you had to examine tissues other than the two we've discussed?

A All the material went to the White House right after the autopsy, within a week.

Q Do you remember during your supplementary--or during your subsequent review at the National Archives ever seeing something like a stainless steel container?

A I don't remember that. Can you tell me what was in it?

Q That's sort of the question that we are interested in. There are some records about there having been a stainless steel container at the Archives. I don't know whether you would have seen that or not. I just want to see if--

A I'm trying to think how the paraffin blocks--it seems to me the slides and paraffin blocks were in a wooden microscopic slide box. I don't think that was in a metal container. And that's all there was.

Q Previously, you have mentioned that you were aware that--or you had heard that Dr. Humes had destroyed or burned some of the notes or records related to the autopsy. Have you ever discussed that issue in any depth with Dr. Humes?

A Yes, we've--I've been present when he's told the

story.

Q He has told the story related to the assassination of President Lincoln--

A No. No, the story of writing up the report and putting the paper in the fireplace.

Q What is your understanding of the reason that he burned the papers from President Kennedy's autopsy?

A Same reason he washed the sheets. He didn't want this material in a museum barn out on 66.

Q Did you yourself ever destroy any records created at or about the time of the autopsy as they related to the autopsy of President Kennedy?

A No. Actually, the only records that I was involved in were the ones on the table here.

MR. GUNN: I'd like to take a short break while I have some of the photos and X-rays brought in.

[Recess.]

MR. GUNN: We now have in the room with us the autopsy photos in the possession of the National Archives as well as the X-rays, and I'd like to ask Dr. Boswell some questions about

them. I have just handed to Dr. Boswell a document marked Exhibit 13, which on its face is the report of inspection by naval medical staff on November 1, 1966, at National Archives of X-rays and photographs of the autopsy of President John F. Kennedy.

BY MR. GUNN:

Q Dr. Boswell, have you previously seen the document that's marked Exhibit 13?

A Yes, I have.

Q Is that your signature on the last page, the second signature down?

A Yes.

Q And could you tell me just in very brief form how you came to sign the document that's now marked Exhibit 13?

A We were notified that the material had been returned to the Archives, and those of us who signed went down to the Archives and met Mr. Rhoads, or Dr. Rhoads, and all the material was brought out to us, and we reviewed it all, re-identified it and labeled it and authenticated it.

Q Okay. So it was your understanding that this

procedure that you were involved in was, at least in part, to assist the Archives in properly cataloguing and labeling the autopsy photographs and X-rays--

A Yes.

Q --would that be fair? Now, you notice, for example, on page 4 where it is referring to 4-by-5 black and white negatives, you can see right next to No. 1 where there is the statement that the negative depicts the "left side of head and shoulders." Do you see that?

A Yes.

Q I'm going to be making reference to the language in this 1966 report as we discuss the photographs today, so I'll be referring to the language there, and you should feel free at any time to refer back to Exhibit 13. I will also be making reference to the photograph numbers that were attached to those photographs at the time of the 1966 inventory. And if you have any questions during the course of or subsequent discussion, don't hesitate to ask.

MR. GUNN: I now have in the room Steve Tilley from the National Archives and Ramona Branch, who will be assisting

us with this process.

Could you please first show to Dr. Boswell the left side of head and shoulders, which corresponds to black and white photo Nos. 1, 2, 3, and 4, and color Nos. 29, 30, and 31?

BY MR. GUNN:

Q My first question to you, Dr. Boswell, is whether you have previously seen the photographs that are in this first view of the left side of head and shoulders.

A Yes, I have.

Q Do those appear to you to be true and authentic photographs taken at the autopsy of President Kennedy?

A Yes.

Q Do you notice any differences between the photographs as they appear now and your recollection of the appearance of President Kennedy from the left profile?

A No.

Q Could you tell me whether you can see on the pictures of the left profile of President Kennedy any lacerations in the scalp?

A No.

Q Did you or Dr. Humes at any time make any lacerations on the left profile of President Kennedy?

A No.

Q Approximately when during the course of the autopsy were these photographs taken? And by that I mean beginning, middle, end.

A This is the beginning, very beginning. These were initial photographs.

Q I asked you a variation of this question before, but as you look at these photographs now, can you tell whether there were any changes made to the appearance of President Kennedy such as the washing of the hair or combing of the hair?

A These are exactly as the body arrived to us. There's blood clotted in here, around the neck wound, some in the hair, not much. We didn't do anything to this.

MR. GUNN: Okay. Could Dr. Boswell now be shown the second view, which from the 1966 inventory is described as the "right side of head and right shoulder," corresponding to black and white Nos. 5 and 6, and color Nos. 26, 27, and 28?

BY MR. GUNN:

Q Dr. Boswell, do you recognize photographs that I have just described as the "right side of head and right shoulder"?

A Yes.

Q To the best of your recollection, are those true and accurate representations of photographs taken at the autopsy of President Kennedy?

A Yes.

Q Could you please describe in general terms what you observe in terms of wounds in the scalp first of President Kennedy?

A Well, the scalp is actually avulsed, and this is a huge laceration. The one that I was talking about in earlier questions.

Q If I could just state for the record, it appears that you're talking about a laceration that is roughly slightly above the ear, that is, towards the vertex, and that the laceration appears to go slightly into the forehead above the right eye?

Would that be fair?

A Yes.

Q Okay.

A This actually shows almost the magnitude of my drawing on the skull the defect here.

Q You're pointing to the uppermost portion of President Kennedy's head; is that correct?

A Yes. Now, what you see at the very top left of the photograph is scalp. This can be folded back down and actually--well, almost completely hide the defect.

Q Would it be fair to say that the portion of the head that we're seeing that looks disrupted in the portion of the photograph is largely the inside of the scalp--

A Exactly.

Q --all pulled back--

A Yes.

Q --and if that were pulled forward, that it would cover the defect?

A Yes.

Q And are you able to view in that photograph any brain tissue?

A Probably a little bit right here on the right side, just above the fragmented bone, between that and the scalp.

There's probably a little bit of brain there.

Q But you would say just a very small amount within the photograph, that principally we are looking at the inside of the scalp?

A Right. And this is a bone fragment that's adhered to the underside of the scalp but belongs up here.

Q When you say the bone fragment, you're referring to the triangular-shaped object right immediately above the ear?

A Yes.

Q Above the right ear. And did I understand you correctly that that is a fragment that has come from another portion of the head?

A Right.

Q And so how would it be that that skull fragment is in that location?

A Well, I think it's probably attached to the scalp that's reflected.

Q So almost as if the scalp is hinged and a piece of the skull is attached to the scalp?

A Yes. I think the color photograph shows it better.

I don't think the black and white shows anything that the color photograph doesn't show.

Q This is going to be a little bit difficult to describe, but you have identified a laceration that goes onto the forehead.

I'd like you to go back from there about an inch-and-a-half and notice a portion of it where the top three parts of it seem to be almost rectangular in shape. Do you see that?

A Yes.

Q Can you tell me what that object is there?

A Okay. This is skull, the white area is skull, and then the skull is fractured, and the bone beyond and above that, behind the hair here, is missing.

Q Okay. And right to the right of the portion that I have described as being rectangular--and when I say to the right, we should say that the head from the direction that we're looking at is at the top of the document--there is something like a V-shaped indentation there. Do you see that?

A Yes.

Q That is coming closer towards the frontal bone. What do you perceive that V-shaped mark to be?

A Well, the bone is fractured in a straight line here, and then this is another fracture margin. And this may come all the way across here, probably does.

Q All the way across almost the coronal suture?

A Yes. This is probably frontal bone, and then this is parietal bone extending up to here.

Q Can you identify any difference between this photograph and how President Kennedy's body appeared from the right profile when you first saw him at Bethesda?

A No. It looks the same.

T3B

Q Was this photograph or were these photographs, which we're describing as View 2 or the second view, taken reasonably near the beginning of the autopsy?

A Yes.

Q Could we turn to the third view, please, which is described in the 1966 inventory as the "superior view of the head"?

They correspond to black and white photo Nos. 7, 8, 9, and 10, and color photos Nos. 32, 33, 34, 35, 36, and 37.

Dr. Boswell, do you recognize those as being

photographs that you previously designated as "superior view of the head"?

A Yes.

Q I'd like to ask you first whether they appear to you to be true and accurate photographs of the autopsy of President Kennedy.

A Yes.

Q Do you see any material difference between the photographs as they appear now and President Kennedy as he was photographed on November 22nd?

A No.

Q I'm going to ask you to look at approximately the midline of the brain. There appears to be a straight line or a straight-ish line that goes--it appears to me to be slightly left of the midline of the brain that goes through the scalp.

Do you see that line that I'm referring to?

A Yes.

Q Could you tell me what that line is, as best you understand?

A Well, that's a laceration margin of--you can see hair,

skin, and subcutaneous tissue, and then a little soft membranous tissue attached with some blood coagulation on the under surface of the scalp.

Q In the photograph, as I mentioned, it appears as if that laceration is somewhat to the left of the midline. If the scalp were put back in place, where would you estimate that that scalp would come on the head?

A I think it would fall over here.

Q You're pointing over to the right side?

A To the right side of the body.

Q So that the laceration that we see there would not have, in fact, been near the midline but would have come much farther over onto the right hemisphere?

A Yes.

Q In that photograph that you're looking at now--again, we're talking about the third view--do you see any material that is readily identifiable as brain tissue?

A I don't think so.

Q Would it be fair to say that what we are seeing there in terms of the open wound is principally the interior of the

scalp?

A Yes.

Q Previously in the deposition, I asked you whether you recalled having seen any brain tissue extruding from the wound at the time that President Kennedy first arrived. Does this photograph help you answer the question about whether there was any brain tissue extruding from the wound?

A Yes. I see none. I can't be sure that some of this material isn't cerebral cortex fragmented, but I think most of it is just blood within the fascia of the scalp.

Q I'd like to point out another straight line. Maybe if we can put the nose going up, there is the line that I mentioned before that appears to be left of the midline, the laceration in the scalp. There appears to be another line of some sort right in the center of the midline. It's not as clear as the other line. Can you see the portion I'm referring to?

A I see it, yes.

Q Can you tell me what that is, as best you understand?

A I think that's just the way the tissue is torn. The way that the bullet came in through here and exploded against

the top of the skull just shattered everything, and I think these are stretched tear marks, like this was, and this was strong enough to completely separate the tissue. This is a similar one that just didn't completely separate it. There are others over here, too.

Q Could that be the superior parasagittal sinus?

A No. That is attached to the under surface of the skull.

Q So it couldn't be that? Could that be any sort of line or space between the right and left cerebral hemispheres?

A I don't think so, because from all the other documentation, I know that that fracture line was like this, and this is going to fold over also toward the right side of the body. And I don't think that these are really midline objects. I think that they're going in this direction, toward the right.

Q Could we turn next to the fourth view, which is described in the 1966 inventory as the "posterior view of wound of entrance of missile high in shoulder"? That corresponds to black and white Nos. 11 and 12, and color Nos. 38 and 39.

Dr. Boswell, do those photographs appear to you to be original and authentic photographs taken at the autopsy of President Kennedy?

A Yes.

Q Do you notice in those photographs any variation that differs in any material way from what you observed on the night of the autopsy?

A No.

Q Can you tell me approximately when during the course of the autopsy that those photographs were taken?

A Very early.

Q I'd like to ask you a question first about the scalp, although that's not the center of the photograph, and ask you whether the scalp had been pulled up in any way in order to keep any flaps from hanging down over the back. I don't know if that question was--

A Yes, I understand.

Q Maybe if we could look at that photograph in conjunction with one from the third view.

A Where the flap is coming down?

Q Yes.

A I know this--the flap is stretched forward here, because if this fell back down--with him in this sort of recumbent position, yes, this scalp would fold down and cover this wound.

Q So you're saying that on the fourth view, which are the photographs that are in your hand right now, the scalp has been pulled back and folded back over the top of the head in a way different from the way that they appeared in the third view, the superior view of the head?

A Yes.

Q Is that fair?

A In the previous one, it was permitted just to drop. In this one, it's pulled forward up over the forehead, toward the forehead.

Q Who, if you recall, pulled up the scalp for the photograph to be taken?

A There are about three of us involved here, because there are two right hands on that centimeter scale. I think that I probably was pulling the scalp up.

Q I'd like you to notice in that photograph--and, again, we're still talking about the fourth view--that there is a little white marking--I don't know what it is--that is very near the hairline.

A Here?

Q Yes. Do you see that either matter of tissue or something--

A I have seen that and worried and wondered about it for all these many years. Some people--many people have alleged that to be the wound. I don't think it is.

Q In relationship to that white marking, whatever it is, could you say or describe approximately where the entrance wound was, where the entrance wound would be in relationship to that?

A Well, I think that the entrance wound is up in here someplace. I'm talking like a couple of centimeters above the hairline and 4 centimeters to the left of the ear. But I can't argue with that. I don't know what that is. I've seen this in other photographs. In some areas, it's a little translucent bubble. I think that the wound of entrance is up in here.

Q Okay. What I'd like to ask you to do is measure with the centimeter measure here. Maybe if we can--

A You can't--well, okay. Let's see. This is--

Q You don't need to try and get it to correspond to the ruler in the photograph.

A Well, this is about two to one, so--

Q Just if you can do it on the actual measurement.

A You want me to measure this?

Q Measure it from--approximately the distance from that white spot that is on the--

A Where I think the wound of entrance is?

Q Yes, that's right, what the distance is.

A Okay. I think this is...about 3.5 centimeters with this scale.

Q Okay. So if President Kennedy were standing erect, then--and we're talking about the measurements corresponding to the photograph and not to real life. But from what I was understanding, you were saying that the measurement would be approximately 3.5 centimeters at approximately a 45-degree angle from that white spot, that is, if President Kennedy were

standing erect? Is that fair?

A Yes.

Q And it's in the direction towards the right ear?

A Toward the ear. That's maybe like 30 degrees.

Q And the point that you are estimating that the entrance wound was located, is that the location that was previously recorded as approximately 2.5 centimeters to the right and slightly above the external occipital--

A Right.

Q Okay. Now, if we could go to the other wounds there, could you identify where the entrance wound was in the body of President Kennedy, outside of the scalp now? Does that wound that you're pointing to correspond to the larger wound that is to the right of the ruler in the photograph? Again, assuming President Kennedy were standing erect.

A Yes.

Q So it's the wound that comes closer to being towards the tip of the ruler towards the neck?

A No, this is blood clot down here. This is not wound.

Q You're referring to a second marking that is somewhat

below--

A Right.

Q --the larger marking. Was the ruler covering, the ruler in the photograph covering any other wound on the back--

A No.

Q --that you're aware of?

A It's just about over the vertebral bodies, the midline. There's nothing underneath it.

Q I'd like to go back to one of the Rydberg drawings that we had looked at earlier--and this is from Exhibit MI 13--and ask you whether in looking at the photograph you think that the wound, that is, the entry wound in the body of President Kennedy, corresponds more closely to the Rydberg photograph or to the drawing that appears in Exhibit 1, the drawing that you made at the time of the autopsy.

A It's sort of in between. There's a lot of skin here above the wound of entry on the back up to where you can see the folds of the base of his neck. But his acromial process is out here and I--

Q Out under the hand in the photograph?

A Yes. And here's his clavicle. This is sort of in between these two.

Q So it's in between the one marked Exhibit 1 and Exhibit MI 13?

A And the Rydberg drawing.

Q If you had to match the entrance wound that you can see on the photograph in View 4 to one of the vertebra, would you be able to give an approximate location, either C7 or C4 or T3, whatever?

A Well, it's certainly not as low as T4. I would say at the lowest it might be T2. I would say around T2.

Q Can you identify an abrasion collar on the wound depicted in the fourth view?

A I'm sorry. Now repeat that?

Q Can you identify an abrasion collar on the wound in the photographs you're looking at now, View 4?

A Are you talking about the one in the posterior?

Q Yes.

A Well, this looks like it's coagulated around here, and that, I guess, is what you would call an abrasion collar.

Q Did you notice an abrasion collar on that posterior wound during the course of the autopsy?

A Oh, yes.

Q So is the question now whether it can be identified by the photograph?

A This is a good wound of entrance. It's indented, almost round. I think that the photograph is very good for identifying that as a wound of entrance.

Q Okay. But in terms of identifying an abrasion collar, does it--

A Oh, I think that's very good. I can't imagine a true forensic pathologist disagreeing with that.

Q I'd like to go to the fifth view, if we could, which is described in the 1966 inventory as the "right anterior view of head and upper torso, including tracheotomy wound." That corresponds to black and white Nos. 13 and 14 and color Nos. 40 and 41. The first question for you, Dr. Boswell, will be whether these photographs appear to be accurate photos of the autopsy of President Kennedy.

A Yes.

Q Let me ask you first whether the wound in the neck that you see from the front is as the neck wound appeared when you first saw it at the autopsy.

A Yes.

Q In your experience, is that wound a typical tracheotomy incision?

A It's pretty big. I'm not sure what "typical" would be, but it's a big tracheos--but I've seen many tracheostomy wounds that big. So it's not too unusual, especially when you're doing it in a terminal, why, you don't worry about the size of the wound.

Q I'm sorry. When you're doing--

A When you're doing it in a terminal patient, why, the last thing you're going to worry about is the size of the tracheostomy wound.

Q I notice that this photo is different from the first view that we took a look at. The eye, at least on the right side, appears to be open. Actually, both eyes appear to be open. Do you recall whether the eyes were open during the course of the autopsy?

A I don't recall that that was a point of interest. I think we just moved back and let the photographer take the picture, and I think maybe positioning the body may have had something to do with stretching the eyelids. But I don't think we made any attempt to take the pictures with the eyes open or closed.

Q So the difference on whether the eyes were open or closed would not be of any material significance in terms of the timing of the photographs?

A No.

Q I'd like you to note the semi-triangular-shaped marking that goes into the forehead. Does that correspond to the laceration that we previously noted in the second view?

A Yes.

Q I'd like to show you Exhibit No. 74, the plastic skull, and the line that is marked 2, that comes towards the front. Is it your understanding that the laceration that is there corresponds roughly to the line that is marked No. 2 on the skull?

A Yes, and I seem to remember this extending down into

the rim of the eye more, which it obviously doesn't from these photographs. And that's why I had drawn this down here.

Q Okay. So the marking that's on the skull on Line 2 probably extends further down towards the eye than would be reflected in the photographs; is that correct?

A Well, I don't know whether later in the autopsy we stretched this so that this laceration extended down there. At some point, it seemed to me that it did. But this obviously is the way that it was when he came in.

Q Okay. Could we turn to the sixth view, which is described as "wound of entrance in right posterior occipital region"? That corresponds to black and white photos Nos. 15 and 16, and color photos Nos. 42 and 43. Do these photographs appear to you, Dr. Boswell, to be accurate representations of photographs taken during the autopsy of President Kennedy?

A Yes.

Q In that photograph, is the scalp of President Kennedy being pulled forward?

A Yes.

Q For what purpose was it being pulled forward?

A In order to take the photograph, because if it wasn't pulled forward, this would just--the scalp would come down and cover the wound of entrance here. And this was necessary to demonstrate the wound here.

Q Okay. Now, as you're looking at the photograph of President Kennedy, if you're looking at it as if President Kennedy were standing erect--of course, he's lying on his side, but we'll look at it from the perspective of the ruler being vertical, pointing upwards, and the head pointing upwards. Could you identify where on the photograph the wound of entrance was located, please--the wound of entrance in the skull?

A This is the one that I have--photograph that I have had a dilemma about for so many years. This is the white spot that you showed me in the other photograph.

Q Yes, down near the hairline.

A Yeah. And that is not where I thought that the wound of entrance was.

This must be the wound of entrance.

Q You're pointing down to the white marking near the hairline?

A Yeah. I'm trying to find anything up in here, and obviously the photographer was taking this in such a manner to show that. I can't find anything else. This is in disagreement with this, obviously.

Q When you say it's in disagreement, you're referring to Exhibit MI 13--

A Yes.

Q --the Rydberg drawing?

A Right. Because this is more in the midline and lower.

Q I'd like to draw your attention to in the color photograph the round, reddish marking just to the right of the ruler, very near the top of the ruler.

A Yes.

Q Could that round or ovular-shaped marking be the entrance wound?

A No.

Q What is that, if anything, that round or ovular-shaped marking?

A I think it's the--this is awfully near the front of the scalp fragment here, and here is a laceration up here with

complete separation. And when--

Q You're referring there to the very top of the scalp--

A Just under the fingers that's holding the scalp up.

And if you let--when you let this fall down, in one of the previous photographs--

Q I'm sorry. Just for the record, you're letting the scalp fall down towards the back and cover where the ruler would be?

A Yes. If you let that fall down, then this would be right in the midline and that line that you asked me about where the tissue was separated but not completely separated. And I think this is probably the other side of that traumatic disfigurement of the scalp.

Q If I understood you correctly, were you saying that that marking that we've been pointing to that is near the top of the ruler and somewhat to the right might be the beginning or at least part of the laceration in the scalp?

A Yes. That's occurring from beneath with the explosion of the bullet.

Q I'd like you to note the parting of the hair that

goes at approximately a 45-degree angle irregularly out to the right. Is that hair that is being pulled to the left covering part of the laceration?

A Probably. I can see it; probably up in here, at least.

Q Is there any question in your mind about whether that photograph may have been changed or altered in any way?

A Oh, I don't know how they would--how anybody could have done that. I mean, all the other things I see here, my hairy arm, everything else looks normal.

Q Holding aside the question of how someone might have done that, is there anything in that photograph that appears to be different from how you remember seeing it on the night of the autopsy?

A No, and I've seen it many times since. I've seen this photograph many times since then, and it's--I think this was the photograph that was taken there. It's just that my memory of this apparent lesion--

Q Down at the bottom towards the hairline?

A --was in a different location. But everything else

fits.

Q In looking at that photograph, do you have any reason to re-evaluate the location of the wound of entrance in the skull from being 2.5 centimeters to the right and slightly above the right occipital protuberance?

A Well, these figures are more important to me than this, because I--this I'm not sure of. These I am sure of.

Q When you say "these figures," you're referring to the autopsy face sheet, Exhibit 1?

A The measurements on the face sheet.

Is there another photograph showing the head wound of entry?

Q The next photograph, we'll look at it in just a minute. Now I'd like to ask you a question about what is underneath the scalp of what we are looking at now. Let's take the marking that appears towards the hairline right at the base of the neck, or where the hairline meets the neck. If we take the point above that, where would you say that the scalp is or that the skull will be missing underneath the scalp that we can view there?

A Probably right about here.

Q So you're--

A Just about the base of the ear.

Q So you're pointing to approximately halfway up the ruler that we can observe and to the right of that small fragment, so the skull is missing--

A Right.

Q --underneath there.

A Yes. The reason I asked about another picture, because it seems to me I remember one picture that shows the tunneling very well. And I'm not sure whether that one shows the position of the entry wound any better, but it does show the one-and-a-half centimeter tunnel.

Q Just to try a different description, because we're trying to put this into words where we're looking at photographs, would it be fair to say--again, we are imagining President Kennedy is standing erect, although he's lying down in this photograph. So with the ruler pointing up, would the portion as it would appear on this photograph to the left of his right ear all be the portion of the skull that was missing?

A Yes.

Q Okay. Could we look at View No. 7, please, which was described in the 1966 inventory as a "missile wound of entrance in posterior skull, following reflection of scalp," corresponding to black and white photos Nos. 17 and 18, and color photographs 44 and 45?

I'd just say, too, Dr. Boswell, this concludes the end of the views that we have of the skull.

[Pause.]

THE WITNESS: I'm sorry. I cannot orient this at all.

BY MR. GUNN:

Q Everyone who looks at these photographs has a hard time orienting it. Can you tell whether that is the posterior portion of the cranium or frontal or parietal? Any idea at all?

A I'm afraid I can't.

May I see the last one that we did?

Q That would be the sixth view, corresponding to photos black and white 15 and 16, and color Nos.--

A Just the color.

Q --42 and 43.

A No. The one before this.

Q Photographs 13 and 14 black and white, and color 40 and 41. Oh, the next one? 11 and 12, 38 and 39.

[Pause.]

MR. GUNN: Okay. Dr. Boswell is now looking at the third view in conjunction with the seventh view, the third view being the superior view of head.

[Pause.]

THE WITNESS: I think it would be foolish to do anything with this.

I think that this is anterior, because this is not the under surface of the scalp that we saw before. I think the scalp is probably back down here. But what we were attempting to show in here, I don't know.

BY MR. GUNN:

Q Would it be fair to say that what you are suggesting now is that the hole that appears in the cranium is towards the frontal part of the cranium?

A I can't be sure.

Q Let me show you two different descriptions that have been made in two documents. The first one that we've been referring to is Exhibit 13, which is the 1966 inventory. That refers to the photograph as being "missile wound of entrance in posterior skull, following reflection of scalp." So that is how that is described in November of 1966.

But then in another document dated in handwriting--and I don't know whether that date is accurate--January 26, 1967, but also signed apparently on January 26, 1967, by yourself and Dr. Humes, that photograph is described not as a posterior wound but as the exit--not as the posterior entrance wound but as an exit wound. Photograph Nos. 17, 18, 44, and 45 show the other half of the margin of the exit wound and also show the beveling of the bone characteristic of a wound of exit.

A Well, I see that, but I...I can't identify anything else in here to tell where we are. This is a different appearance of scalp, but there are other things in here that I can't identify. This looks like part of the chest flap that's

down here. The hair and the bone--this is skull, I'm sure of that.

Q You're pointing to the jagged piece very near the center of the photograph.

A Right here.

Q I'll ask that you draw an X to the side, so the corners of the photograph will be in the center. That is skull, you say; is that correct?

A Yes. And this looks like a beveled round area here of skull bone.

Q That's the notch right near the center of the photograph.

A Right in the center. And the hair helps identify it, but, otherwise, I cannot tell. There's too many bone fragments around, and I see no brain at all.

Q Dr. Boswell, could you tell me who drafted the language that was used in Exhibit No. 13, the 1966 inventory?

A I think we all worked on this, and obviously a long time. Let's see. Who was there?

Well, it must have been Jim and I. John Stringer

wouldn't have anything to do with this, and I doubt if John Ebersole would. So we had to be responsible for this.

Q Was there anyone from the Justice Department who participated in this inventory in 1966?

A Well, the only person I can think of would be Carl Eardley.

Q Now, there was a subsequent inventory which the Justice Department likely participated in, which I'll show you.

But do you remember whether there was anyone involved in the earlier--

A Yeah. Carl Eardley, I think he went with us on almost all the occasions.

Q Do you know why Mr. Eardley went with you, what his role was?

A No. I don't have any idea. But everything we did, he was with us. He was an awfully nice man.

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But he would not have had anything to do with the descriptions, obviously, nor Dr. Rhoads. He spent a lot of time with us when we were doing this also, but he--I think Jim and I probably were responsible. And even then, we had trouble

with this, and the one with the little teardrop on it we had trouble with.

Q That's view--

A And everybody else who saw those did.

Q When you refer to the teardrop, you're referring to the fifth view described as the "wound of entrance in right posterior occipital region."

A Right, yes.

Q View 6, yes.

On page 5 of Exhibit No. 13 for photograph No. 17, which is what we are looking at here, it says that there is a missile--or that it's depicting a missile wound of entrance.

Do you see where that wound of entrance would be or what you were referring to, at least--

A It couldn't be.

Q --as of 1966?

A Couldn't be.

Q Couldn't be?

A No.

Q In View 7.

A No. The only--well, I know the dilemma we were in. This is what appears to be calvarium, a piece of bone plate, skull plate.

Q And you're referring to the bone that's in the center of the photograph in View 7?

A Right. A fairly sizable white piece of bone. And if you look at this beveling of the bone here, this would be a wound of exit, because the skull bevels outward on the outer surface.

Q So that the dimensions of the wound on the interior of the cranium are less than the dimensions would be on the exterior of the cranium?

A Yeah, and it--the bullet would have to be coming from over here through.

Q From the inside out?

A Yeah.

Q Which would mean--

A And that would make this a wound of exit, which is described there. But there's no way this could be called a wound of entrance, and there's no other--now, the only other

thing is that if--on the reflected scalp here, there is a wound or something. I can't see that. I see a paper clip pulling that back that way. It's such a dilemma, and I think anybody that tries to conjecture that film...

Q Would it be your best estimate right now that the description of that photograph from 1966 under entry No. 17 on page 5 would be inaccurate?

A Inaccurate, and I'm not sure about that one either.

Q Okay.

A In '67.

Q When you say the other one, you're referring to Exhibit 14?

A Right.

Q Could you tell me who drafted the document that is Exhibit 14?

A This is Jim's language, I think.

Q To me as a lay person, it appears as if in November of 1966, View 7 is being described as an entrance wound, and in January of 1967, two months later, it's being described as an exit wound. First, do you have any reason for thinking that

my understanding is inaccurate? Is there a switch in how those two photographs are described?

A Yes, I agree, and I have no explanation for that. I think they were both wrong, and I think the reason is that it's just such a terrible photograph.

Q Do you recall engaging in any discussions with anybody about how that photograph should be described that would have led to a change between November of 1966 and January of 1967?

A No. I don't remember that Pierre came over for that, but I see he and Jim and I were the ones who--on the second occasion. Well, now, that might be the answer right there. See, Pierre was a forensic pathologist. He was trained as a forensic pathologist, and he was extremely able relative to ballistics. And he may have talked us into this. That's the only thing I can think of. Whether he'll remember that or not, I don't know.

Q Do you remember Mr. Eardley participating in any discussions over this issue?

A He did nothing more than greet and say hello to us on occasions like that. He didn't even stick around.

Q We're about to look at some photographs that show just the brain. Putting those photographs aside, are there any other photographs that you remember having been taken during the time of the autopsy that you don't see here?

A The only one that I have a faint memory of was the anterior of the right thorax. I don't see it, and haven't when we tried to find it on previous occasions, because that was very important because it did show the extra-pleural blood clot and was very important to our positioning that wound.

Q There are additional descriptions of photographs showing--described as showing the entrance wound in the skull from both the exterior and the interior with the scalp reflected. Do you remember any photographs with the scalp reflected showing the wound of entrance in the skull?

A Well, I seem to remember a couple of photographs. That might be one, and particularly one showing the beveling of that same wound--or not beveling, but the tunneling. But I can't imagine that there are any photographs missing. Numerical-wise, are they all here?

Q Not that I'm aware of any photos that are missing

since the 1966 inventory. The question would be whether there were other photographs taken that were not in the 1966--

A Yeah, well, we've always looked for the one of the chest cavity, and then I seem to remember photographs, color photographs of the tunneling.

Q Do you remember seeing the photographs themselves or do you remember taking the photographs?

A I've never seen the one of inside of the chest. The one of the skull wound, I thought I remembered seeing it, but I--now, I've seen an awful lot of pictures like in Livingstone's books. Where those came from, I don't know. And whether they're fabricated, some of them, or not--and I may be confusing pictures I've seen that are alleged to be autopsy photographs.

Q Let me show you Exhibit No. 14. The paragraph at the bottom on page...

A Yes, now where is that?

Q The photographs that are referred--for the record, the portion of the document that we're looking at says, "The scalp wound shown in the photographs appears to be a laceration and tunnel, with the actual penetration of the skin obscured

by the top of the tunnel." That's referring to View No. 6, photographs Nos. 15, 16, 42, and 43, if we could see one of those.

A That's the same one.

MR. GUNN: Dr. Boswell is now looking at the sixth view.

THE WITNESS: I guess maybe that's the one I remember. It looks different to me today as I see this. I don't appreciate the tunnel as much as I have in past examinations, and the position is different.

You see, the problem is, though, that this scalp is all loose, and this might not be the--as we're viewing this, this might not be the position of this wound.

BY MR. GUNN:

Q Again, you're referring to the mark down near the hairline--

A Right, on--

Q --on View 6?

A Photograph 42. This scalp may fit differently, and this might easily be closer to the underlying bony wound of

entrance.

When I look at this again, it sounds very much like we've described it here.

Q Okay. In other words, this photograph of View 6 corresponds with the language used in Exhibit No. 14 on the bottom of page 3?

A Exactly.

Q Could we turn to View 8, which is "basilar view of brain"? View 8 corresponds with black and white photo Nos. 19, 21, 22, and color photo Nos. 46, 47, 48, 49.

Dr. Boswell, were you present when the photographs in View 8 were taken?

A Yes.

Q And approximately when, to the best of your recollection, were the photographs taken? Let me try it a different way. Were the photographs taken at the supplementary examination of the President's brain?

A Yes, within less than a week following the autopsy, after formalin fixation.

Q Do the photographs correspond to your recollection

of damage to the brain as depicted from the basilar view?

A Yes.

Q Could you tell me whether any portion of the right or left hemisphere of the cerebellum is disrupted from the photographs?

A Quite a bit. You said cerebellum?

Q Yes.

A Oh, I'm sorry. I was thinking of cerebrum. The cerebellum is a little bit disturbed here, but I'm not sure that that is due to this trauma. Most of the trauma I see is to the right lobe, and most of that is to the superior portion, which this doesn't show because this is upside down.

Q By upside down, you mean it's just a view from the bottom?

A Right.

Q From that photograph, the way that it appears in the photograph, is the left hemisphere of the cerebellum disrupted?

A A little bit. Certainly the midline is torn. See, the falx comes down between these two and then is connected to the skull above, and that's been torn away, and all this

has been disrupted, the connections between the two lobes. And there's hemorrhage, fragmentation, a lot of fragmentation of the right lobe. The only part of the right lobe that's intact are these two areas right here, like this.

Q Now, did the bullet wound--if we're thinking of President Kennedy standing erect or sitting erect, did the bullet wound go from a lower part of the brain--again, we're talking back 2.5 centimeters to the right of the EOP and then go in an upward direction out of the right temporal parietal area?

A Yeah, the bullet entered probably behind the cerebellar pons here, back in there, and then it was coming back up this way and I guess it probably would have come through the brain at some point, through the brain, but it's going to hit the calvarium up right at the top. And then that explosion is the thing that's going to sort of disperse all the tissue here and bone and the scalp overlying. So it's coming from down here, up through.

Q From a lay perspective, it would seem to me, based upon what you've said, that the disruption in the cerebrum would

be more towards the point of entrance and lower.

A I think it's probably going to be at the point of exit. I think when the bullet hits the calvarium above, that's when the explosion took place, because all the bone was just crushed at that point. And a lot of force is extended all the way throughout the calvarium--or throughout the cranial vault, and that's when a lot of this damage took place.

Q Was there any disruption to the mid-brain?

A Oh, it's totally demolished. This is mid-brain right here, and everything there is gone--well, not gone, but it's stretched--but I don't know what caused that, whether that was the bullet hitting something or whether it was the tugging on the falx. You see, the falx is intimately associated with all the structures in the mid-brain, and between the two.

Q What I'm not understanding--and this, I'm sure, comes from my lack of medical training--is that it seems as if there is a laceration that goes through the mid-brain, which I would characterize as the lower part of the brain.

A Yes.

Q But there's also a laceration that goes near the

vertex of the brain, which would strike me as being the upper.

Also, it seems as if there is some suggestion that the portion between that upper and lower laceration is relatively more intact than the upper and lower portions. Is that correct or incorrect?

A I think you're right, but the forces causing this are multiple: the explosive force of the bullet hitting the calvarium, the upper surface; the explosion of the falx, because that all stretched at the same time, and it is pulling brain against bone, and then separating from both eventually. And so all that trauma is taking place at the same time or in a very brief interval. But not much of this could be caused by bullet entering. Of course, fractures took place at two stages.

A lot of fractures took place when the bullet entered the cranial vault, and then they really took place when the bullet went out.

Q Could any of the left cerebellum have been disrupted by either the entrance or the exit?

A Well, see, the dura encapsulates all the lobes of the brain, and they're all intimately attached. And when you

start tugging on the dura in any one place, or especially in multiple places, is when the--that explosion really expanded the whole cranial vault. And those membranes are really being pulled and pushed in all directions, and they're going to do all kinds of--this kind of trauma.

Q So, in other words, even though the bullet would have entered near the right cerebellum, the right cerebellum could emerge intact, whereas the left cerebellum could be disrupted?

Is that fair?

A Yeah.

Q And looking at the photograph, is that what you would understand to have happened?

A Yes. I think that the major traumatic event was the explosion of the bullet against the top, but the entry of the bullet into the posterior cranial vault, from that point on, varying degrees of trauma are taking place. And then it was all just catastrophe.

Q Would it be your understanding that the bullet entering in the back of the skull entered at a point above the cerebellum?

A No.

Yes, I guess you're right. Above the right lobe of the cerebellum, right. Do you have an anatomical diagram there?

Q I'll show you a document marked Exhibit MD 71, if that helps.

A And let's see. If you have a skull--see, it's awful close to the cerebellum. But, see, these membranes that are coming down between the two cerebral cortexes, they fold around and envelop the cerebellum as well. And they're all attached to each other and to the bone. And when fractures start occurring in linear fashion all over the place, they're going to be pulling that. And so that alone is going to cause a lot of distortion or destruction of the cerebellum.

Q But if the entrance wound was near the right cerebellar hemisphere, wouldn't the disruption have been on the right cerebellum?

A Well, initially at impact. But by the time it impacts up here and stretches all the membranes, then it's going to be all over. And, actually, if there's injury, it's more to the left lobe, although I can't be sure of that. These are

sort of leaves, and they--there may not be a lot of trauma here.

This may just be distortion through the fixation and removal.

Q When you say "not a lot of trauma here," you're referring to the right--to the left cerebellar hemisphere?

A Yes. But there certainly is a lot to the mid-brain, right above that where it connects to the mid-brain and to the cerebral cortex.

Q Do you see in this basilar view of the brain any incisions, surgical incisions?

A No.

Q Should a surgical incision be evident for the removal of the brain?

A No. The removal of the brain takes place by separating the spinal cord right here. That's the only thing that attaches the brain, other than the meninges. And we section that and just lift it out.

Now, this is the way we examine the brain, and had we sectioned it, we would lay it just like this and then start slicing it here. And I think from the microscopic description of the brain--we have microscopic sections of the transected

cord.

Q Exhibit 4.

A Oh, and also we did take some sections of the right parietal lobe, corpus callosum, that was right in here someplace. Anterior portion, frontal lobe, frontal parietal cortex. So there are a lot of sections of brain.

Q Could you look at F, from the right cerebellar cortex?

A Mm-hmm.

Q Why would this section have been taken from the right cerebellar cortex?

A I suppose just to have normal tissue to compare with the other side.

Q Shouldn't there have been a section--shouldn't a section have been taken from the left cerebellar cortex as well, given the apparent disruption?

A Well, I'm not sure that this is real. This might not be real traumatic--in the fresh or fixed brain, we may have seen lesions over here rather than here, and there may not have been any lesions at all. We may have just taken a section for reference.

Q Previously, we noted that there was no fresh brain weight recorded on the face sheet in Exhibit 1. In the supplementary autopsy report, there is a weight for the brain.

Do you see the weight that that gives there?

A Yes.

Q Do you remember the brain being weighed in the supplementary?

A I don't remember that, but I can't imagine that we would not weigh it.

Q I'd like to turn back to Exhibit No. 7, which is the autopsy manual, where it has the standard weights for organs of the body. If you remember, we looked at Appendix 3 on page 72 where standard weights were given for several of the organs.

Could you look and see what the standard weight is for the male brain?

A Average is 1,400.

Q And approximately what percentage of President Kennedy's brain had been destroyed or removed?

A I don't think a third. Less than a third.

Q A third of the right hemisphere or a third of the

total?

A A third of the total.

Q That would mean that the brain--correct me if I'm wrong--the brain would have weighed, fully intact, approximately 2,000 grams. Would that be correct?

A No, because this is fixed now.

Q Approximately how much weight does fixing add to the weight of the brain?

A Theoretically, it shouldn't add any. After a certain period of fixation, it should revert to its normal weight because the water that is taken into it would be equalized. So--

Q Had the brain been fully fixed at the time the photographs were taken?

A I doubt it. I don't know when these were taken. Fully fixed usually requires over a week, depending upon how you do it. Normally, in a normal autopsy, what we do is inject the brain. We tie the vessels off, circle of Willis, and then we inject formalin into it by drip. And we'd let that go on for a week. And a lot of fluid is absorbed into it, so it would gain quite a bit at that point. But then leaving it in the

fluid, it would balance out. I can't tell you about the...

Q Again, from a lay perspective, it seems as if the brain of President Kennedy, even after a large portion of it had been blown away, is much or is significantly larger than the average brain. Does anything seem incorrect or unusual to you in those figures or that analysis?

A I don't think so. I would not put too much emphasis on that, I don't think.

Q So even when a good portion of it is blasted away, after having been set in formalin, the 1,500 grams is not an unusual--

A I don't think so.

Q Could we look at the ninth view, please? This corresponds to black and white photographs Nos. 20, 23, 24, 25, and color photographs Nos. 50, 51, and 52. It's described in the 1966 inventory as the "superior view of the brain."

The first question is: Do the photographs appear to you to be accurate representations of the brain as you observed it at the time of the supplementary examination?

A Yes.

Q Dr. Boswell, I'd like to show you a document that is marked as Exhibit No. MI 12, which is one of the Rydberg drawings from the Warren Commission report. Notice that in Exhibit MI 12, the bullet appears to be going in a straight line through the brain. Are you able to tell by examining the superior view of the brain in the ninth view whether the bullet, in fact, proceeded in a straight line?

A No. I don't think there's any way of making that determination.

Q Was it possible to determine the course of the bullet through the skull by an examination of the brain?

A Not of the brain. It was a little bit easier by examination of the skull, but the right hemisphere of the brain is just so torn up, and there's no way of determining a track.

But we did find--we have a good wound of entrance, and then we have metallic fragments, I believe in the--around the right orbit. So that gives some sense of direction as far as the shooter.

Q By examining the brain by itself, are you able to determine to a reasonable degree of medical certainty whether

there was one or more than one bullet wound to the head? Again, just by examination of the brain.

A The only clue, I think, is the fact that the scalp is reasonably well intact, and we only have one wound of entrance on the scalp. And by the same token, we only have one wound of exit. It's huge, but--now, if he was shot with this one from behind first and then shot secondly in the same place with a second one, that would be impossible to tell. But then you would have to have another wound of exit someplace, which you don't have.

Q Would you be able to make any of those determinations solely by examining the brain without reference to the scalp or skull?

A I don't think so.

Well, another factor in favor of only one weapon or one shot entering the brain is the reasonably limited destruction of the brain. I mean, even though it's catastrophic, still, look at the intact left lobe and the intact cerebellum. So, really, it's the right cerebellar hemisphere--or cerebral hemisphere that's damaged.

Q In your answer to a previous question, you made reference to the exit wound in the skull. Did you ever see any evidence of any beveling in the skull at the point where you determined there was an exit wound?

A At the time of autopsy we didn't. But then when we reviewed the photographs, some of that beveling in the skull is equivocal, and obviously we weren't able to tell.

Q So would it be fair, then, to say that you determined during the course of the autopsy where the beveling was at the entrance wound, but you could not determine any beveling at the exit wound?

A That's true.

MR. GUNN: Okay. We can go to the X-rays. Well, let's take a break first.

[Recess.]

MR. GUNN: We're back on the record.

BY MR. GUNN:

Q We're now going to be looking at X-ray No. 1, anterior-posterior view of the skull. I think that is inverted left to right, if we can switch.

Dr. Boswell, are you able to determine with any degree of certainty whether the X-ray that you're looking at now is an X-ray of President Kennedy?

A I have not seen this in an awful long time, but it certainly looks like what I remember.

Q Let me draw your attention to a white semicircular marking in what appears to be in the right orbit, and I'll say that's on the left side of the X-ray as we're looking at it now. Do you see that white apparently radio-opaque object?

A Yes.

Q Do you know what that object is?

A No.

Q Do you know whether that is an artifact that is just there as part of either the developing process or whether that is a missile fragment?

A No, I can't tell you that. I don't remember the interpretations. I see a lot of metallic-looking debris, X-ray-opaque material, at the site of the injury. And I remember that there were a lot of fragments around the right eye, and the rest of these could be from bullet fragments as

well. I'm not sure--we found a couple of very minute metal fragments, but I do not relate them to the X-ray.

Q Can you relate that, again, apparently large object to any of the fragments that you removed?

A No. We did not find one that large. I'm sure of that.

Q Okay. Could we look at X-ray--

A I had forgotten about the tremendous fractures that were there.

Q Do you see anything about that X-ray--again, View No. 1--that would seem to be inconsistent with what you recall from the night of the autopsy?

A No. It's very consistent with the trauma to the head.

Q Could we look at X-ray No. 2, a right lateral view of the skull, with two angle lines overdrawn on the film? Dr. Boswell, can you identify X-ray No. 2 as being an X-ray taken of President Kennedy on the night of the autopsy?

A Yes.

Q First, where on the X-ray that you're examining would you identify the bullet entrance wound?

A I don't think I can identify the entrance wound.
I just need to move that.

I cannot identify the entrance wound here.

Q Do you recall if on the night of the autopsy you were able to identify the entrance wound in any of the X-rays?

A No--well, the entrance wound, no. I thought that there was a little bit of metallic material along one transverse process down here near the entrance wound in the back, but I don't see that in this X-ray. But this is all scattered around the exit wound in the head.

Mr. Gunn, I think we dug this piece out right here, but I'm not sure.

Q You're pointing to what looks like a sliver near the--

A Right eye.

Q --front right above the eye?

A Right. Right supraorbital area. Because I think that's about the size, but I'm not sure.

Q If you could point to where on the X-ray you understand the entrance to have been even though you don't see it appearing on the X-ray.

A It must be around here someplace.

Q That would be--

A Has to be in this general area right here. The left, left side of the X-ray at the base of the skull, just a inch or so behind the vertebra.

Q I'd like to draw your attention to what appears to be, in my term, sort of a shelf-like disruption of the skull.

Do you recall seeing that on the night of the autopsy? I will say, in a very inexpert way, it's near the cowlick area, although that's not a medical term, I understand. But do you understand?

Did you observe anything in that area on the night of the autopsy?

A No.

Q Do you have any understanding as to what that shelf or plate is there?

A You're talking about--I don't know what any of this is. But you're talking about this fractured line right here?

Q In the first instance, just right on the periphery.

A Right here?

Q Yes.

A Okay. Well, I recognize what that is. That's a depressed fracture.

Q Does that depressed fracture correlate in any way to the entrance wound that you observed on the night of the autopsy?

A I think it's a long way from it. I think that's quite a ways from the entrance wound.

Q Do you see what appear to be radio-opaque trail, metal dust?

A Yes.

Q Going across the very top, I'd say the sixth, the top eighth of the skull, left to right, without indicating anything. Do you know what that is, what those are?

A Those are metallic fragments that have really dispersed. At some point, maybe when it entered, those perforated and went up, or maybe when it exited, those fragmented and fell there.

Q Do the fragments tell you anything about the direction or the course of the bullet through President Kennedy's brain or skull?

A Well, at first glance, that looks like a straight line. But then you've got fragments elsewhere in there, and I--that wouldn't be inconsistent with a track, but I think that those have fragmented off at some point where the bullet has hit something really hard and scattered. I don't think traveling through the soft tissue of the brain that tiny fragments are going to just spill off like that.

Q Okay.

A I don't think that's a track even though the fact that it's a straight line might suggest that.

Q To an untrained eye such as my own, there appears to be a large, dark space, almost as if it's a figure eight, in the frontal area, somewhat behind the eye and down into the cheek. Do you see that area that I'm referring to?

A Mm-hmm.

Q Can you tell me what that represents?

A Well, it looks almost like a pneumoencephalogram where you got air in and displaced tissue, but--I suspect that that's what that is. I think that's a space with a lot of air in it.

Q So though it is darker, that does not signify that it is missing skull?

A Oh, I don't think--well, the missing skull is all over. Of course, the drawing we have there is sort of similar to that, isn't it?

Do we have an AP, one straight on?

Q Yes.

A What was the one I just--

Q The first one.

A The first one? May I look at that one again?

Yes, you're right. Here it is. See, this is what's missing here.

Q So you're pointing at what I would describe as the temporal and parietal bone on the right hemisphere? Is that--

A I guess that would--actually, that looks like frontal there, doesn't it? Frontal, temporal, and some parietal. But that's where this space is here.

Now, you see, this is not in a straight line that it is here. It's not a straight line here. These are all scattered around.

Q You're referring to the radio-opaque fragments.

A Right, and I think probably the bullet hit up here.
That might very well be that piece right there.

Q You're referring to the large semicircular piece in
the AP view--

A Yes.

Q --being the same as the one that appears to be in
the frontal bone in the lateral; is that correct?

A Right, and it's in a different perspective. Here
it's narrow, but around--about the same size.

Q Okay. If we could see the lateral one more time.
I'd like to show you a portion from the autopsy protocol.
Particularly make reference to the multiple minute metallic
fragments along the line corresponding with the line joining
the above-described small occipital wound and the right
supraorbital ridge.

A Okay. What's your question?

Q Now, the question would be: Are the minute metallic
fragments referenced in the autopsy protocol those fragments
that go along the top of the AP?

A Right.

Q And I would just note that it says that "They're aligned corresponding with the line joining the above-described small occipital wound"--the entrance wound--"and the right"--that doesn't say--when I said "entrance wound," that was my gloss to this.

A Uh-huh.

Q --"and the right supraorbital ridge." To me, it appears as if the line does not correspond with an entrance wound, but would be elsewhere.

A Is that from the autopsy?

Q This is the autopsy protocol.

A And this is--

Q Now, I don't know that what is being referred to in the autopsy protocol is what is being referred to on this X-ray, but the question for you is: Is what you are seeing on the X-ray itself what is being referred to in the portion of the autopsy protocol that I just quoted?

A Right. Although I interpret it differently now than whoever did that. I see the line here, but it doesn't connect

with the wound of entry, although they say it does there. And apparently we gave this to the cops, O'Neill and Sibert.

Q This is the autopsy protocol.

A Yes. This is, too.

Q Yes, right. But when you say you gave it to the cops, I'm not sure. Sibert--

A To the FBI guys.

Q You mean you gave the X-rays?

A No. That fragment.

Q Oh, the fragment, okay. That's what wasn't clear. Okay.

Was there any other X-ray that you now recall having seen that showed a line of metallic fragments connecting to the small wound of entry?

A Not of the head.

Q Is the fragment trail that you see on the AP--excuse me, on the lateral X-ray, No. 2 that's in your hand, does that correspond to what you saw on the night of the autopsy, as best you recall?

A Yes.

Q Okay. I think that's it for the X-rays.

Dr. Boswell, if we could now shift from the time of the autopsy and the preparation of the supplementary autopsy report to the Warren Commission, I'd like to ask you whether you ever met with anyone on the Warren Commission staff?

A Yes.

Q Do you remember with whom you met?

A The Senator from Philadelphia, Hatch--or...

Q Arlen Specter.

A Arlen Specter. Sorry.

Q Hatch is from Pittsburgh. He was not a Senator at the time, though.

A No.

Q Did you meet with anyone else on the Warren Commission staff in addition to Mr. Specter?

A He was the only one I worked with. We appeared before the full Commission and met all of them, and they asked us questions.

Q Approximately how many times did you meet with Mr. Specter?

A It seemed like an awful lot, but probably it was no more than three or four times.

Q What kinds of things did you discuss with Mr. Specter?

A Well, we--I think he told us more than we told him. He would bring us information and then ask us how it fit the autopsy. And he showed us the clothes. He showed us the Zapruder film a couple of times. That's all I can remember, although it seemed like an awful lot of times we met with him.

Q Did he ever suggest to you that you change any of your testimony or to report something different from how you understood it?

A No.

Q Were you aware of any other person making a contact with you in relationship to the Warren Commission who suggested that you change your testimony in any way to correspond with any other ideas they might have?

A No.

Q Very early on in your deposition today, you made reference to Mr. Eardley from the Justice Department asking you to go to New Orleans; is that correct?

A Mm-hmm.

Q What did he say to you about the reason he wanted you to go to New Orleans?

A He was really upset. He says, "J, we got to get somebody in New Orleans quick. Pierre is testifying, and he's really lousing everything up." And I called Jim to see if he didn't want to go, and he was having--his mother-in-law was ill, and he couldn't go. So they put me on a plane that day and took me to New Orleans, and that was one of the most interesting adventures of my life. I met--do you want to hear all of this?

Q Yes, please.

A Carl Eardley sent me to a hotel, and I went into the hotel and registered. I was already registered. I got up to my room, and there was a note on my bedside table telling me to meet somebody at a certain place at a certain time. And this was a scary place. This was down around the wharfs, and the federal attorney's office was in a big warehouse down there. And that's--I met somebody on the street. He took me in there, and then they told me what was going on. They showed me the

transcript of Pierre's testimony for the past couple of days, and I spent all night reviewing that testimony. And it was this bit about the general. Jim said, "Who's in charge here?"

And when they asked Pierre in court who supervised and ran the autopsy, he says, "Some Army general." And so that is why--and I never appeared. I spent two days down there and then came home, never appeared in court. And the government won their case.

Q Actually, the government was the district attorney.

So my next question for you actually was: What was the United States Department of Justice doing in relationship to a case between the district attorney of New Orleans and a resident of New Orleans?

A Well, they--I went over and met somebody, some lawyer in another firm that night, and I don't know who he was representing. But, obviously, the federal attorney was on the side of Clay Shaw against the district attorney.

Q Do you remember the name of that federal attorney?

A No. I have no idea.

Q Was it Harry Connick?

A It could very well have been. That name sounds--of course, Connick is not an uncommon name. It could have been.

Q Do you recall meeting with an attorney named Wegman?

A No.

Q Or Dymond?

A Thirty years ago, no, I can't remember that.

Q What did the government attorney say to you? Did he help prepare potential testimony for you?

A They were getting ready to. I guess it all depended on what Pierre did that next day or something. I don't know.

All I know is that they--he was answering in very strange ways their questions, and, yes, they sent me down and talked to me and tried to get me to agree that he was very strange and that I could do a better job or something.

Q Did you ever talk to Dr. Finck about his testimony?

A No.

Q Did you ever talk to him at all after that point?

A Oh, yes, many times. Pierre's wife was there with him, and he was staying in the same hotel I was. And so we met just by chance at breakfast the day after I arrived. And

we didn't discuss why I was there. I'm sure he asked me, and I don't know what I told him. But, anyway, we have met on a number of occasions since then. His daughter is in this country, and she was going to school in Missouri for several years. And I used to--they'd stop by here and visit with us as they were on their way. We were very good friends.

Q Do you have any idea why he was answering the questions the way he was in the Clay Shaw trial?

A Well, you'll know when you meet him, if and when you meet him. He is a very strange--but a sharp guy. He was a good pathologist, a hard worker. He was devoted to the United States and to the Army despite the fact that he was going back home. But he's a strange guy. I knew that long before we invited him over to help us on this autopsy. He's just a strange fellow.

Q Do you recall who paid for your trip to go to New Orleans?

A I would assume that the Justice Department provided my plane tickets and my hotel bill.

Q Other than for this experience in New Orleans, were

you contacted at any other point by any representative of the U.S. Government to provide assistance for the government in regard to the Kennedy autopsy?

A No. But aside from that, Carl Eardley called me when King was assassinated and said, "J, we got a problem down in Memphis. They're alleging that we're letting the Reverend die." And then he called me back and said, "He died. Would you go down there and supervise the autopsy?" And I said I'm the last--by this time, it had been several years, and we'd had an awful lot of stuff about the autopsy. And so I said, "I'm the last one you want to go down." And I gave him the name of the guy who was at that time the neuropathologist--I knew what they were going to find because he had been shot in the neck and the spinal cord was severed. And I gave him the name of the neuropathologist at the AFIP, and he called him and got him to go.

That's the only other incident relative to that.

Q Earlier in the deposition, you made reference to a letter that you sent, I believe to Mr. Eardley, suggesting that a panel be created to review some of the autopsy material.

Could you describe for me what circumstances led to your writing that letter?

A This was--had to be '68, maybe. I'm not sure when it was. And he just called me out of the blue and said he thought it was a good idea--said they thought it was a good idea to have an independent panel. I believe that's what it was.

Now, I had been talking about this with perhaps him and other people, Jim particularly, that now that all the material was back, that it should be reviewed, if they're not going to. And whether Carl suggested it or whether I convinced him, I'm not sure. But, anyway, he was willing to accept the letter, which he essentially described to me what they wanted, and I wrote it.

You have a copy of that, do you not?

Q Not your letter to him. We have the report from the Clark Panel, but I haven't seen your letter to Mr. Eardley.

A I can provide you a copy of that if you would like.

Q Yes. Yes, I would. Was your letter to Mr. Eardley?

A Yes. I'm almost positive--I'm sorry. I wrote that to the Justice Department. I rather think it was--because as

I sit here, I sort of think I wrote to Mr. Eardley relative to our recent conversations and so forth. So I think I...

Q I'd like to show you the document that ended up coming from--it's called the Clark Panel Report. I'm showing you a copy of Exhibit 59, which is the Clark report. Have you previously seen the document that's now marked Exhibit 59?

A Yes.

Q Other than writing the letter that helped prompt the creation of the Clark Panel, did you have any further role in conjunction with the panel?

A I was there at the time they met and went over the material. I guess we had lunch together and discussed the case and so forth.

Q Was anyone else from the autopsy present with the Clark Panel, such as Dr. Humes or--

A Jim was there. Finck may very well have been. I'm not sure. And I sort of think Eberhart was there, but I'm not sure.

Q Ebersole?

A Ebersole. This was the good panel. We met with a

couple of panels. This one were all people that, for some reason, Jim and I knew. Not that we had anything to do with selecting them, but these guys--well, we did know Oscar Hunter and Russ Fisher.

Q I'd like you to turn to page 14 of Exhibit 59, the bottom paragraph, the first sentence of which reads, "One bullet struck the back of the decedent's head well above the external occipital protuberance."

Did you have any discussions with members of the Clark Panel about the entrance wound location for the skull wound?

A We had a lot of discussion with them.

Q Did you understand or did you ever come to believe that the Clark Panel located the entrance wound at a point superior to where you had identified the entrance wound in the autopsy protocol?

A I never believed this. I think Jim at one point came to believe this, because he testified before the House commission to that effect, I think. But if you can believe that photograph that we were just looking at, this is not true, because that is way below the point they're indicating.

Q So, in other words, when you say that this is not true, you're referring to the portion that I just read to you?

A Right, from the Clark commission.

Q About how much time did you spend with the Clark Panel members?

A At least a half a day, maybe all day.

Q What was the principal purpose that you understood they were trying to perform?

A Just review the material that was available and see if their conclusions were different or the same or similar to ours.

Q Did you ever meet with anyone from the Edgewood Arsenal in regard to the autopsy of President Kennedy?

A No. I know that they did a lot of ballistic work down there, and Pierre had worked there or had been stationed there. But I did not have anything to do with them.

Q Do you recall, for example, meeting anyone connected with Edgewood Arsenal in conjunction with your testimony before the Warren Commission?

A No.

Q Do you ever recall showing any of the autopsy photographs or X-rays to anyone other than may have happened in conjunction with the Clark Panel or the House Select Committee on Assassinations?

A Would you repeat that?

Q Sure. Other than with the Clark Panel and the House Select Committee on Assassinations, have you ever met with any other people and shown them photographs of the autopsy?

A No. I've never had available X-rays or photographs.

Q Did you yourself ever communicate directly or indirectly with any of the following people about the autopsy:

First, Robert McNamara?

A No.

Q Robert Kennedy?

A No.

Q Jacqueline Kennedy?

A No.

Q Admiral Burkley?

A No.

Q President Johnson?

A No.

Q I'd like to give you an opportunity now to provide any kind of statement, if you wish to make one, about the autopsy or anything that you think could help clarify things. But I'd like to take care of two short pieces of business first.

First, Doug Horne has drawn black lines over the markings that you made on the skull, and I'd like to ask you if that appears to you that those are reasonably accurate overdrawings on yours, understanding still that these are just approximate dimensions of the wound.

A And not meant to be precise, but just show magnitude and relative position.

Q Sure. I wonder if I could ask you just to initial the skull.

A I hate to do this. It doesn't matter where, I guess.

Q It doesn't matter where.

A Date?

Q And the date, February 26th. Thank you very much.

[Discussion off the record.]

BY MR. GUNN:

Q Dr. Boswell, is there anything that you would like to say that you think might help clarify or explain anything that you had to do with the autopsy of President Kennedy?

A I can't think of anything.

MR. GUNN: Okay. I'd like to thank you very much for your time and patience. We appreciate your coming today. Thank you.

THE WITNESS: It's been relatively painless. Thank you very much for my lunch.

[Whereupon, at 4:15 p.m., the deposition was concluded.]